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## HEALTH STUDIES OF NEGRO CHILDREN

### I. INTELLIGENCE STUDIES OF NEGRO CHILDREN IN ATLANTA, GA.

#### I. Introduction

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During the scholastic year 1925-26 the United States Public Health Service, in cooperation with the Georgia State Board of Health and the Atlanta Board of Education, conducted a survey of the mental and physical status of the children in the negro public schools of Atlanta. The psychological examinations, with which this paper is concerned, were made in five of the elementary negro schools, and include tests—group, individual, or both—of a total of 3,028 children.

In four of the schools, group tests were given to all the grades except the first, that is, to grades 2 to 6, inclusive. As group tests are more unreliable with very young children whose comprehension and cooperation it is somewhat difficult to secure in such circumstances, it was thought best to devote the time to the subjects that promised the most reliable results. Consequently the data on group tests contain only 79 cases of children below grade 2, and these are from two sections of a high first grade in the same school. In the fifth school, as time did not permit the testing of all classes, the group examination was given only to the fifth and sixth grades, in order to increase the number of cases at the higher age levels.

The Otis Group Intelligence Scale<sup>1</sup> was used for all the group testing—the "Primary" form for the first four grades and the "Advance" for grades 5 and 6. The selection of cases for individual examinations was determined chiefly by the Otis test. As many as possible of the children who made low or doubtful scores in this scale were given individual tests; a few other special cases were referred by principals and teachers, and a group of unselected first-graders was studied, these last consisting chiefly of the children who had received physical examinations in connection with the same general survey. The individual examinations consisted of the Stanford revision of the Binet-Simon tests<sup>2</sup> supplemented, at the discretion of the examiner, by Kohs Block Design Test,<sup>3</sup> the Lin-

<sup>1</sup> Otis, Arthur A.: Otis Group Intelligence Scale—Manual of Directions for Advanced and Primary Examinations. 1921 revision.

<sup>2</sup> Terman, Lewis M.: *The Measurement of Intelligence*. Boston, 1916.

<sup>3</sup> Kohs, S. C.: *Intelligence Measurement*. New York, 1923.

coln Hollow Square,<sup>4</sup> and the Healy Construction A.<sup>5</sup> All of the tests were made by the writer.

## II. The Group Tests

In order to consider the data in their most objective form, the results are first studied in terms of crude score, that is, the total number of points made on the test. This necessitates the separation of the primary test (first four grades) from the advanced examination (here the fifth and sixth grades). Age designations in this paper always refer to the last birthday. Thus, in the 7-year group are included all children who have passed their seventh but have not reached their eighth birthday, and whose median age would therefore approximate 7 years 6 months.

In the absence of comparable data on white children from this locality, comparison is probably best based on the figures furnished by Otis. His subjects come, he says, "from some 200 cities throughout the country."<sup>6</sup> When the mean scores obtained on the primary examinations of the group studied by age groups 7 to 12, inclusive, are compared with the Otis white norms<sup>7</sup> for the respective mid-year points (see Table 1), yearly increments in score are shown in both cases. They are appreciably larger in the case of the American white norms.

TABLE 1.—Mean scores of Atlanta negro children on Otis primary examination compared with Otis's norms for American whites

	Age					
	7	8	9	10	11	12
Negro.....	31	36	41	43	47	56
Norm.....	28	41	54	66	74	79
Difference <sup>1</sup> .....	3	-5	-13	-23	-27	-29

<sup>1</sup> Minus sign indicates that the score of negro is lower.

The increments generally decrease with age, and this is relatively more marked in the case of the group here studied. Although the mean score of the 7-year-old negroes is slightly higher than the Otis norm, at every succeeding age level the score falls progressively below the standard.

Table 2 makes a similar comparison in the case of the advanced examination.

<sup>4</sup> Dearborn, Walter F., Shaw, Edwin A., and Lincoln, Edward A.: *A Series of Form Board and Performance Tests of Intelligence*. Harvard Monographs in Education, Series 1, No. 4, September 1923, pp. 32-33, 56-59.

<sup>5</sup> Pintner, Rudolf, and Paterson, Donald G.: *A Scale of Performance Tests*. New York, 1917, pp. 44-53, 122-126.

<sup>6</sup> Op. cit. p. 54.

<sup>7</sup> Ibid. p. 71.

TABLE 2.—Mean scores of Atlanta negro children on Otis advanced examination compared with American white norms

	Age				
	10	11	12	13	14
Negro.....	52	54	59	57	55
Norm.....	61	74	85	95	105
Difference.....	-9	-20	-26	-38	-50

Attention should be called to the fact that the relatively few 10-year-old negro children in the fifth and sixth grades—83 cases in comparison with 328 cases in the lower four grades—are obviously superior ones and, hence, do not give a fair measure of racial performance on this particular scale. At the other extreme, the 13 and 14 year olds who have not progressed beyond the sixth grade and whose scores on this test fall below that of the 12-year-olds, are just as obviously not fair representatives of negro achievement at those ages. At ages below 13, where the selection is fair, the racial means of the group studied fall consistently below the white norms, the discrepancy between the two increasing with age.

In fairness to the negro children it should be noted that, while our figures for the negroes are strictly empirical, the Otis norms are partly theoretical, the curves, naturally, are somewhat straightened and points are moved in accordance with *a priori* considerations. If the actual means are computed from the Otis data <sup>a</sup> the figures given in Table 3 are obtained for comparison.

When these figures are compared with those in the two preceding tables, the most striking point is that Otis, in preparing his norms, has decidedly readjusted his figures for ages 10, 11, and 12 in the primary examination. The norm he sets is markedly higher than his obtained mean at each of these age levels. His obvious reason for so doing is because his subjects, coming as they do from the first five grades only, do not include any of the brighter children of these ages and so give a mean that is too low. The same point can, of course, be made with respect to the negro subjects, who, in the case of the primary examinations, are not drawn from grades higher than the fourth, and in the case of the advanced examination are confined to grades 5 and 6. The amount of retardation that is characteristic or normal for the races will be referred to later.

<sup>a</sup> Ibid, pp. 76-80.

TABLE 3.—Comparison of mean scores of Atlanta negroes and of Otis's subjects

	Age								
	Primary examinations						Advanced examinations		
	7	8	9	10	11	12	11	12	13
Negro.....	31	36	41	43	47	50	54	59	57
White.....	31	42	52	59	60	62	75	85	95
Difference.....	0	-6	-11	-16	-13	-12	-21	-26	-38

TABLE 4.—Otis test scores, variabilities, difference from American white

## PRIMARY EXAMINATIONS, GRADES 1 to 4

Age	Atlanta negroes					American white (200 cities)					Difference from American white	
	Number of cases	Mean score	Probable error	Standard deviation of distribution	Probable error	Number of cases	Mean score	Probable error	Standard deviation of distribution	Probable error	Difference	Probable error of difference
7.....	215	31.36	±0.47	10.13	±0.33	501	31.01	±0.45	15.07	±0.32	0.35	±0.65
8.....	335	35.56	±.41	11.05	±.29	537	42.45	±.44	15.26	±.32	-6.89	±.60
9.....	306	41.26	±.42	11.93	±.30	496	50.35	±.43	14.31	±.31	-9.09	±.60
10.....	328	43.46	±.47	12.72	±.34	306	51.60	±.54	13.88	±.38	-8.12	±.71
11.....	215	46.92	±.57	12.46	±.41	127	50.02	±.89	14.81	±.63	-3.10	±1.06
12.....	211	49.80	±.57	12.31	±.40	70	48.86	±1.17	14.89	±.83	0.94	±1.30

## ADVANCED EXAMINATIONS, GRADES 5 AND 6

10.....	83	52.23	±1.83	24.66	±1.29	2,435	76.11	±0.35	25.70	±0.25	-23.88	±1.86
11.....	180	54.22	±1.16	23.03	±.82	4,186	79.22	±.29	27.58	±.20	-25.00	±1.19
12.....	246	59.02	±1.06	24.54	±.75	3,565	77.02	±.30	26.64	±.21	-18.00	±1.10
13.....	222	57.43	±1.02	22.49	±.72	1,918	71.18	±.35	22.57	±.25	-13.75	±1.08
14.....	150	55.47	±1.47	28.62	±1.04	842	66.48	±.54	23.42	±.38	-11.01	±1.56

For the sake of ultimate fairness, a comparison may be made which probably favors the negro group. That is, for comparison only, those cases of Otis's may be taken which were in the same grades as those to which we gave the respective tests. Table 4, which gives the means and measures of variability for the subjects of this study, also gives the same data for whites who, in the case of the primary examination, are confined to the first four grades and, in the instance of the advanced examination, to the fifth and sixth grades. We are most concerned with the differences and their reliabilities shown in the last three columns. Whereas, of the 1,670 negro children whose scores on the primary examination we are considering, only 79 were in the first grade, there are 662 white first graders in the 2,039 cases we are now using for comparison. The negro means, then, especially at the lower ages, eliminating as they



do the duller children who are in the first grade, are most probably higher than they should be. This comparison gives a slight lead (0.35) at age 7 to the group under study, which, when taken into consideration with its large probable error ( $\pm 0.65$ ), becomes entirely negligible. At all succeeding ages through 11, the Otis group are substantially ahead, regardless of the question of selection, and at age 12 the difference in favor of the negro (0.94) is smaller than its probable error ( $\pm 1.30$ ). The lead of the white children increases through year 9, beyond which age there is evidence that the problem of retardation is affecting their scores much more seriously than it is those of the negroes. The number of cases of white children begins to fall off markedly at year 10, indicating that the majority of children of these ages are further advanced in school.

The data<sup>9</sup> from which Otis standardized his primary examination has 240 cases of 10-year olds in the fifth grade, in comparison with his 306 cases of lower grading that are now being considered. At 11 years, at which age there are 127 of his cases in the first four grades, there are 135 in the fifth grade, and there are the same number of 12-year olds in the fifth grade in comparison with the 70 more retarded cases. On the other hand, reference to data here presented for negroes (Table 4, column 2) shows that there are 328 10-year olds in the first four grades to 83 in the fifth and sixth, 215 11-year old "primaries" to 180 "advanced," and, for 12-year olds, 211 "primaries" to 246 "advanced." If these two lots of data may be taken as typical, school retardation is more prevalent among the Negroes; the average white child of a given age is more advanced in school than the colored child of the same age; and the retarded colored child is a more normal racial representative than is the retarded white.

Otis's age-grade distribution for the advanced examination<sup>10</sup> leads to the same conclusion. The number of cases below, coincident with, and above the fifth and sixth grade selection in this study, are as follows:

Age	Grade 4	Grades 5 and 6	Grades 7, 8, 9, 10, 11, and 12	Age	Grade 4	Grades 5 and 6	Grades 7, 8, 9, 10, 11, and 12
10.....	1,972	2,435	38	13.....	330	1,918	4,229
11.....	1,077	4,186	616	14.....	120	842	4,345
12.....	575	2,565	2,508				

The conclusion seems fair that, on the primary examination, white children 10 years old and older who have not progressed beyond the fourth grade are too inferior to be used as racial representatives, and on the advanced examination the fifth-sixth grade selection does not give fair white averages beyond year 11. With the negro group

<sup>9</sup> Ibid, p. 80.

<sup>10</sup> Ibid, pp. 76-77.

here studied, the age-grade distribution seems to imply that for 11-year olds the primary group is probably the more typical, but that for 12-year olds the advanced group is certainly the more "normal." The results indicate, also, that beyond the latter age the negro subjects still in the elementary schools are inferior members of the race and can not with fairness be used as a basis for comparison. On the advanced test, at 10 and 11 years, where retardation seems to affect neither race—though the negroes at these ages are probably the more accelerated, relatively—the superiority of the white child is attested by differences ( $23.88 \pm 1.86$ ,  $25.00 \pm 1.19$ ) which, when referred to their probable errors, are seen to be very large and reliable; the difference at 11 years is somewhat larger and more reliable than that at 10.

Before leaving Table 4 it might be noted that, in all cases, especially before retardation plays a prominent part, the means, when taken into consideration with their probable errors, are seen to be quite distinct and reliable, and that the group variabilities, as measured by the standard deviations of the distribution, are generally greater in the cases of the white children.

Figure 1 pictures the various relationships which have been discussed. It shows that regardless of yearly increments (through age 12) the negro falls progressively below American white norms and below their averages, unless the latter are unduly weighted with retarded cases. Actual deterioration in performance in the case of 13 and 14 year old negroes is not assumed on the basis of present evidence, and those ages are not excluded from the generalizations. In like manner, when the selected American white cases give means that fall below those of preceding years (see dotted line on graph), whereas other data prove that in reality the yearly improvement curve is still advancing (see broken line), the selection that deviates from the trend shown by the more inclusive data must be discounted. Figure 2 pictures the same facts in terms of relative or proportional change rather than of concrete units.

Since, in considering crude or total scores on the Otis test, it is essential to keep distinct the primary and advanced examinations, the number of cases at each age level can be increased—and so the statistical adequacy—if total scores are not used, but "percentile ranks," which are said by Otis<sup>11</sup> to be comparable in the two examinations. These percentile ranks, of course, presuppose a norm. The child whose score coincides with the norm for his age would have a percentile rank of 50, meaning that in a normal distribution he would excel 50 per cent of the cases and be excelled by 50 per cent. A percentile rank of 10 means that a child excels 10 per cent of children of his age and is excelled by 90 per cent.

<sup>11</sup> Ibid, pp. 52-53.

The appendix gives the complete age and grade distribution, by percentile ranks, of the children of this study. The same data are condensed in Table 5, which emphasizes the clinical groupings, giving the number and the per cent of cases of each age which fall within each of the major categories. It will be seen that in the "feeble-minded" and "borderline" groups the percentage of cases generally increases with age, whereas in the "normal," "superior,"

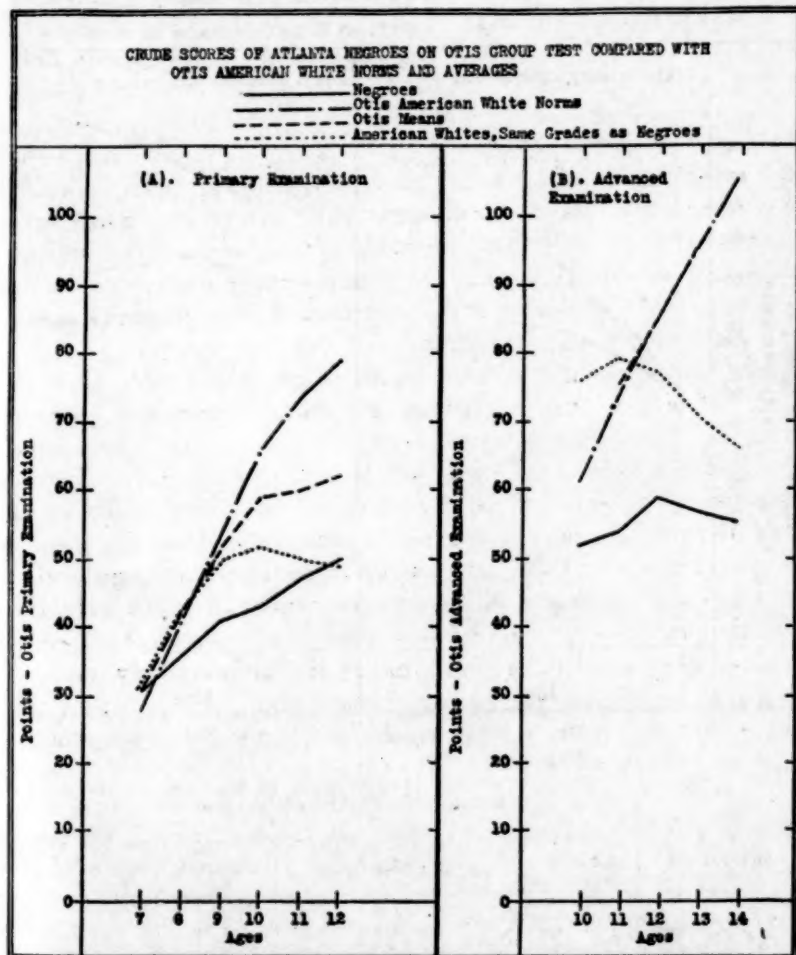


FIG. 1.

and "very superior" groups it decreases. The central tendencies of the age levels are seen to move constantly from the superior to the inferior extremes with increasing years.

Table 6 gives the means and variabilities of percentile ranks for the several ages. The mean is lower at each succeeding age. The seven-year mean denotes a good average performance (by American white standards); the eight and nine year scores, though increasingly

lower, come within the range of "normality"; by 10 years the mean in this group of negro children has fallen below the lower limit of "normality" into the region classified as "dull"; and therein are found all the means of the higher ages.

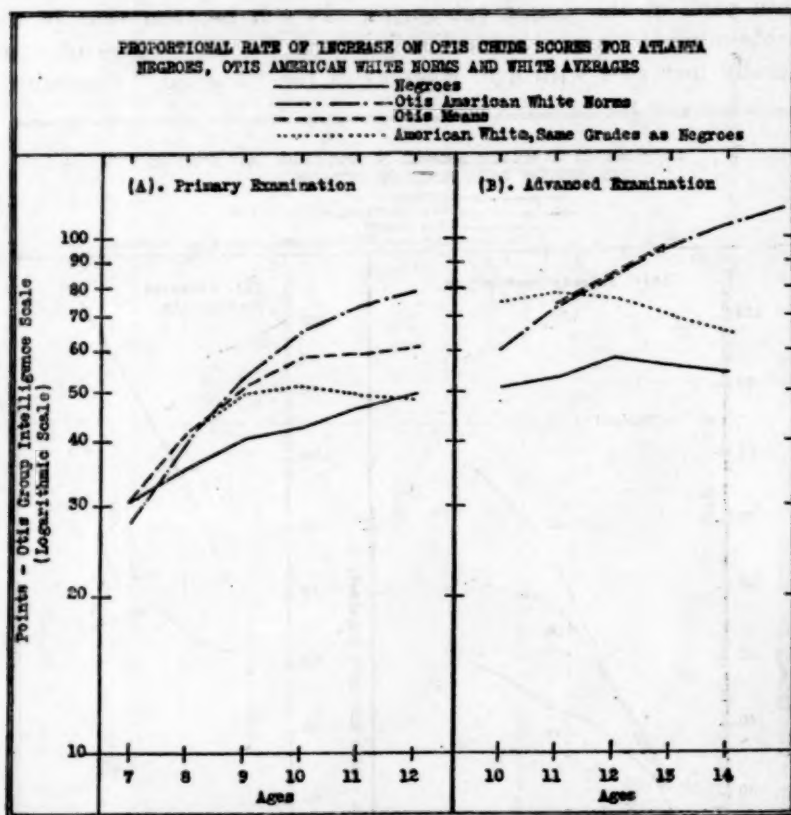


FIG. 2.

TABLE 5.—Percentile rank distribution on Otis tests, by age and clinical groups—Atlanta negro children

Age	0.00-0.40, feeble-minded		0.50-4.90, border line		5-19, dull		20-79, normal		80-94, superior		95-99.9, very superior		Total
	Cases	Per cent	Cases	Per cent	Cases	Per cent	Cases	Per cent	Cases	Per cent	Cases	Per cent	
6							44	74.6	13	22.0	2	3.4	59
7					22	10.2	159	74.0	30	14.0	4	1.9	215
8			10	3.0	76	22.6	225	66.8	26	7.7			337
9	6	1.6	46	12.0	125	32.7	198	51.8	7	1.8			382
10	31	7.5	107	26.0	185	32.9	132	32.1	3	.7	3	.7	411
11	29	7.3	107	27.1	139	35.2	112	28.4	8	2.0			395
12	47	10.3	140	30.6	132	28.9	129	28.2	9	2.0			457
13	48	11.1	99	31.1	103	32.4	67	21.1	1	.3			318
14	35	17.4	87	43.3	51	25.4	25	12.4	3	1.5			201
15	14	16.1	46	52.9	22	25.3	5	5.8					87
16 and over	15	62.5	7	29.2	2	8.3							24
Total	225	7.8	649	22.5	807	28.0	1,096	38.0	100	3.5	9	.3	2,886

Graph 3 pictures these facts and relationships. It will be noted that a consideration of percentile ranks serves to corroborate the generalizations brought out in this study.

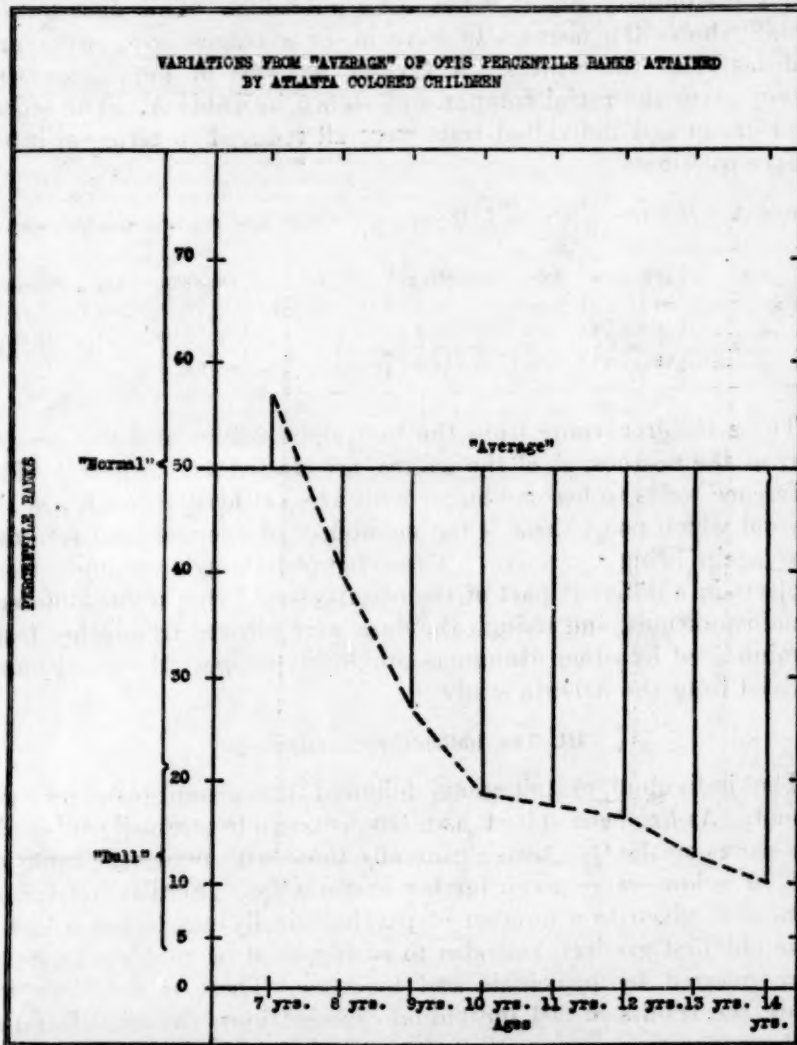


TABLE 6.—Otis percentile ranks and variabilities—Atlanta negro children

Age	Number of cases	Mean percentile ranks	Probable error	Standard deviation of distribution	Probable error
7	215	56.64	$\pm 1.07$	23.29	$\pm 0.76$
8	337	39.70	$\pm .89$	24.54	$\pm .63$
9	382	26.95	$\pm .72$	20.96	$\pm .51$
10	411	18.73	$\pm .67$	20.26	$\pm .48$
11	395	17.69	$\pm .67$	19.45	$\pm .48$
12	457	16.50	$\pm .60$	18.75	$\pm .43$
13	318	12.58	$\pm .56$	14.72	$\pm .39$
14	201	10.06	$\pm .73$	15.38	$\pm .52$



It is interesting to note that the results here presented are not at variance with those of other investigators. In 1923-24 a survey of specially handicapped children was made in the State of Illinois, and a preliminary report <sup>12</sup> has been published. This distribution table <sup>13</sup> shows the negroes to have lower averages and lower variabilities than the whites. A further analysis of data from this survey gives the racial comparisons shown in Table A. The scores from group and individual tests were all reduced to terms of intelligence quotients.

TABLE A.—Differences between I. Q. scores of whites and negroes—Illinois survey

Age	Difference	Age	Difference	Age	Difference	Age	Difference
6.....	10.6±1.3	9	20.1±1.3	12.....	26.7±1.0	15	18.7±1.6
7.....	17.3±1.9	10	25.2±1.1	13.....	31.0±1.1	16, 17	15.1±2.2
8.....	19.6±1.9	11	29.1±1.2	14.....	22.0±1.4	.....	.....

These children come from the first eight grades and the greater part of the negroes, as of the whites, are classed as "urbans." The difference tends to become larger with age—at least through age 13, beyond which point there is the possibility of selection and retardation again being operative. These figures, though obtained from subjects in a different part of the country and living under different social conditions, and though the data were secured from other tests administered by other examiners, obviously support the conclusions derived from the Atlanta study.

### III. The Individual Examinations

The individual examinations followed the group tests in each school. As has been stated, as many as possible of those who made low scores on the Otis tests—generally those with percentile ranks of "5" or below—were given further examination. Similar individual tests were given to a number of psychologically unselected 6 and 7 year old first graders, and also to such special or problem cases as were referred by principals and teachers. There is available for study the results of 604 individual examinations, though all of the performance tests were not given to all of these children.

The Stanford revision of the Binet-Simon Scale was used as the basic test in all the individual examinations and was believed to yield the most reliable data for individual diagnosis. The Kohs Block-Design test was given to 201 children, and was then dropped from the schedule. In view of the poor work done on this test by most of the negro children, the examiner thought that sufficient material

<sup>12</sup> Adler, Herman M: Report of the Survey of the Specially Handicapped Children in the State of Illinois. State publication, 1925.

<sup>13</sup> Ibid., p. 11.

had been collected to show a racial inaptitude for this type of performance and that the time could be better devoted to securing data with other psychomotor tests. Thereafter, the Lincoln Hollow Square form of board was used with most of the children, giving records, in 369 cases, of the number of problems solved within the one minute time limit, and also of the average seconds per problem. In calculating the last item the time was taken, to the nearest second, of each problem solved within the minute, each failure was given a score of 90 seconds, and the total time was divided by 8, the number of problems. Healy Construction Test A was used in 274 cases. The procedure differed somewhat from the generally prescribed one in that the work was discontinued if the problem remained unsolved at the end of three minutes, whereas the standard time limit is five minutes. This was done because decided difficulty was experienced in inducing most of the children to continue their efforts even as long as the three minutes. The great majority of those who did not succeed within a much shorter time lost interest or became discouraged. They frequently stopped and urging was necessary to get them to work until the end of the shorter interval. If the child failed, he was quietly shown how to fit in the pieces—unsupplemented by any verbal explanation—and in any case a second trial was given. If the first trial was a success, the child was asked to see whether he could do it more quickly next time. Five trials were given and in every case where the preceding one had been unsuccessful, the child was shown before being asked to try again. In computing the total time for the five trials, 180 seconds was used as the score for each failure.

Table 7 gives the intercorrelations of the test scores<sup>14</sup> and Table 8 gives the same correlations, with the factor of age distributed or held constant. The coefficients are naturally lowered in the second instance, since, in a group of varied ages, the mere factor of chronological age rather than that of relative intelligence for age, is responsible for the fact that many correlations are high. The child who does well in one test is likely to do well in another, *because he is older* rather than because he is proportionately more intelligent than the younger child who makes lower scorings on both.

<sup>14</sup> In calculating the correlations for the first trial of "Healy A" test the failures are placed at 180 seconds. Placing them at 300, the standard time limit, raises the correlation with the Otis Primary Score from  $-0.169$  to  $-0.175$ . The correlation with the Lincoln test, average seconds per problem ( $0.078$ ) becomes  $0.100$  if the failures are valued at 400, and  $-0.282$  if the 103 failures are eliminated altogether. Omitting the failures from the calculation is ignoring a large and significant part of the data, and obviously gives an erroneous coefficient, since it implies that the cases used are believed to be typical of all. The question of the fair placement of the failures is not so easily settled, but within the limits experimented with, the resultant difference to the correlation seems quite small. In subsequent calculations based upon these coefficients, our arbitrary placing of failure at 180 gives prediction scores more favorable to the children studied than had a higher value been used.

TABLE 7.—*Test intercorrelations—Atlanta negro children*

## CORRELATION COEFFICIENT

[Otis Percentile Rank—Binet I. Q. =  $0.377 \pm 0.027$ ; number cases = 402]

	Age	Otis group test, total score		Stanford-Binet, mental age	Lincoln Hollow Square	
		Advanced	Primary		Number of problems	Average seconds per problem
Otis:						
Advanced.....	$0.025 \pm 0.021$					
Primary.....	$.447 \pm .012$					
Binet: Mental age..	$.719 \pm .013$					
Kohs: Points.....	$.366 \pm .041$					
Lincoln:						
Number of problems.....	$.583 \pm .023$	$-0.007 \pm 0.064$	$.346 \pm .045$	$.583 \pm .023$		
Av. seconds per problem.....	$1-.600 \pm .023$	$1-.653 \pm .037$	$1-.371 \pm .044$	$1-.598 \pm .023$		
Healy A:						
Time, 1st trial.....	$1-.119 \pm .040$	$1.131 \pm .066$	$1-.169 \pm .052$	$1-.119 \pm .040$	$1-0.090 \pm 0.042$	$0.078 \pm 0.042$
Total time, 5 trials.....	$1-.209 \pm .039$	$1-.776 \pm .027$	$1-.309 \pm .049$	$1-.250 \pm .039$	$1-.183 \pm .041$	$1.170 \pm .041$

## NUMBER CASES

Otis:						
Advanced.....	1,001					
Primary.....	1,885					
Binet: Mental age..	604					
Kohs: Points.....	201		147	201		
Lincoln:						
Number of problems.....	369	100	171	369		
Av. seconds per problem.....	368	108	171	368		
Healy A:						
Time, 1st trial.....	274	101	157	274	258	257
Total time, 5 trials.....	267	100	152	267	254	253

<sup>1</sup> In a correlation of "time" scores with point scores or ratings wherein increase in excellence is denoted by figures of increasing magnitude, a negative coefficient naturally has a positive meaning and indicates a positive relationship between achievements in the two performances; and vice versa.

TABLE 8.—*Test intercorrelation, age constant—Atlanta negro children*

	Otis group test, total score		Stanford, Binet, mental age	Lincoln Hollow Square	
	Advanced	Primary		Number of problems	Average seconds per problem
Kohs: Points.....		0.29	0.37		
Lincoln:					
Number of problems.....	-0.02	.12	.29		
Average seconds per problem.....	1-.80	1-.14	1-.30		
Healy A:					
Time, 1st trial.....	.13	1-.13	1-.05	1-.03	0.01
Total time, 5 trials.....	1-.79	1-.25	1-.15	1-.08	.06

<sup>1</sup> See footnote to Table 7.

Binet mental age and the two measures of the Lincoln test are seen to be the most dependent upon chronological age, and the advanced Otis test the least so. The last should not be unexpected when we consider that a large part of the Otis scores are obtained from the

older, retarded children. Kohs and Lincoln tests yield the highest correlations with the Binet—probably the most dependable single measuring instrument—when the effect of age upon the relationships is eliminated. The correlation of Otis percentile rank and Binet intelligence quotient is positive and, in the light of its probable error, quite reliable; but the coefficient ( $0.377 \pm 0.027$ ) does not seem as large as might have been expected in the case of two indices each of which is, in itself, a measure of brightness irrespective of age. The first trial of the Healy test, if it measures anything at all in this group of children, measures something that seems to be quite different from what is measured by all the other tests—the coefficients, age constant, ranging from  $-0.13$  to  $0.13$ . The total time of five trials on the Healy, however (see Table 8), has a decidedly high correspondence ( $-0.79$ ) with the Otis Advanced, and a real, though not as marked, correlation with the Otis Primary ( $-0.25$ ). The average seconds per problem on the Lincoln also seems to be an excellent indication of accomplishment on the Advanced Otis ( $-0.80$ ). It is interesting to note the four low correlations between the Lincoln and the Healy Tests ( $0.01$ – $0.08$ ), though both are psychomotor problems of the form board type and proficiency in the two might have been expected to be closely related. On the contrary, however, facility in handling the one test seems to give us no prediction of what may be expected with the others.

If attempt is made to summarize and generalize from these correlations, there would seem to be justification in saying that the Kohs test gives a fairly good measure of intelligence as gauged by the Binet and the Otis primary tests. The Lincoln test also corresponds satisfactorily with the verbal tests—provided the relationship between the number of problems solved in the former and the score on the Otis Advanced be excepted. This does not seem contradictory when it is considered that there are only eight problems, and that these, being designed for younger children, do not give an adequate range for the older subjects of the Otis Advanced. The Healy test seems to have little in common with the other measures, if only the first trial on the construction problem is considered, but the total time of five trials does give an excellent indication of accomplishment with the Otis Advanced and a very good one with the Otis Primary. The Lincoln and the Healy tests apparently do not measure the same thing.

#### 1. THE STANFORD BINET TEST

Due to the nature of the selection of cases for individual examination in the study, largely by inferior performance on the Otis scale, the data are not such as are capable of yielding objectively adequate measures of racial performance. There are, however, unselected



groups of 6 and 7 year children, whose showing on the Binet scale is interesting to consider. Table 9 gives the comparative scores of the two ages.

TABLE 9.—*Stanford-Binet scores of unselected 6 and 7 year old negro children*

Age	Number of cases	Mental age				Intelligence quotient			
		Mean (years-months)	Probable error (month)	Standard deviation of distribution	Probable error	Mean	Probable error	Standard deviation of distribution	Probable error
6.....	54	6-0.7	$\pm 0.87$	9.43	$\pm 0.61$	103.2	$\pm 1.04$	11.32	$\pm .73$
7.....	51	7-0.3	$\pm .83$	8.76	$\pm .58$	94.8	$\pm 1.01$	10.72	$\pm .72$
		Months		Probable error of difference		Intelligence quotient		Probable error of difference	
Differences <sup>1</sup> .....		2.6		$\pm 1.20$		-8.5		$\pm 1.45$	

<sup>1</sup> Minus sign indicates score of 7 year olds is lower than 6 year olds.

In considering totality of performance, as is done in this table, it is noted that, in terms of mental age and of intelligence-quotient, both 6 and 7 year groups are thoroughly "normal" by American white averages. There is the same falling off with age, relative to white standards, that was noted consistently in the study of the Otis test results. The difference in intelligence quotient between the ages ( $-8.5 \pm 1.45$ ) is quite reliable statistically and is the more significant since it reinforces conclusions drawn from other data,<sup>15</sup> and gives some indication of the age at which this increasing "slowing-up" in mental development on the part of the group studied can first be observed.

The Stanford-Binet test is capable of yielding much information of a qualitative kind on the types of performances at which the subjects do their relative best and worst; but this has not been attempted in the present paper. The examiner's observations, however, while they are not offered as accurately calculated statistical findings, may not be without interest, regardless of their partly subjective nature. There was noted what may be described as lack of sensory discrimination in various fields, coexistent with inability to criticise or see discrepancies between accomplishment and the ideal or pattern. Illustrative of this, for example, are inferior work with weight discrimination (IX<sub>2</sub>), in giving rhymes (IX<sub>6</sub>), and in many instances of word definition, as well as in some performance tests which will be discussed in a later section. With reference to inaccurate interpretation of verbal stimuli, it is interesting to note that, even after the difference in spelling and in pronunciation between the given word and the one

<sup>15</sup> The writer in an unpublished M. A. thesis found that with negro children, aged 8-12, from the colored public schools of Lexington, Ky., all ages made averages inferior to those of whites, on a summation of points from several individual tests of the Cornell series, but differences between race averages were greater at each successive year.



with which it was confused had been pointed out, large numbers—in fact it seemed most of the children—persisted in interpreting “copper” (vocabulary test) as “copy,” “pork” as “poke,” “lecture” as “electric” or “election,” and “civil” as “silver.” In like manner, it seemed that the great majority of children defined “charity” (XII<sub>2</sub>) as “something to ride in” or “a hearse,” and “justice” as “‘cute’ ingestion” (acute indigestion). In other words, a vague similarity of sound with some better known word was sufficient to prevent them from getting an accurate auditory conception of the one in question. It also seemed that they were relatively inferior in repeating digits backward and in copying the diamond (VII<sub>6</sub>). The tests in which they seemed most proficient were those of a practical nature, such as knowing coins (VI<sub>5</sub>) and tying a bow (VII<sub>4</sub>). They also gave the impression of doing well in auditory rote memory and in interpretation of pictures (XII<sub>6</sub>—verbal imagination?). To summarize, the examiner’s belief is that they do best at practical and rote performances, and poorest at those performances involving discrimination and critical accuracy.<sup>16</sup>

Upon qualitative race differences comparatively little work has been done. Two recent articles<sup>17</sup> reporting experimental investigations with white and negro children, stress the need for analytical study of the individual rather than for the creation of race norms in terms of general intelligence.

## 2. KOHS BLOCK DESIGN TEST

In Kohs block-design test the subject is required to reproduce, with a set of colored cubes, certain color-form designs which are drawn on cards. The designs vary in size and complexity, and a point scale has been worked out which makes deductions from each maximum design value for excess time and moves. The final point score may be interpreted into “mental age.” The method of procedure described by Kohs<sup>18</sup> was followed by the examiner in administering and scoring this test.

The impression was soon gathered that this test held special difficulties for the negroes; their score on the block designs seemed to be much inferior to their showing on the Binet test. Especially striking was what appeared to be an inability to criticize their own work, to recognize a failure as such, a tendency to offer a markedly erroneous

<sup>16</sup> The writer’s study, previously referred to, showed, by quantitative measurement, the negroes studied to be superior to the whites in immediate memory for familiar objects, but inferior in processes involving reasoning and judgment and in mental content or fertility of ideas.

<sup>17</sup> Sunne, Dagny: Comparison of White and Negro Children by the Terman and Yerkes Bridges Revision of the Binet Tests. Peterson, Joseph: Lanier, Lyle H., and Walker, H. M.: Comparison of White and Negro Children in Certain Ingenuity and Speed Tests. Both articles in *The Journal of Comparative Psychology*, Vol. V, No. 3, June, 1925.

<sup>18</sup> *Op. cit.*, pp. 64-77.

solution with an apparent self-assurance of its correctness. This is decidedly in keeping with the general type of performance discussed in the preceding section on the Binet tests; accurate analytical and critical work seems difficult for the negro.

The block design test was given to only 14 unselected 6-year-olds—children who were not tested because of low scores on the Otis—and to the same number of unselected 7-year-olds; but regardless of the few cases, something of interest may be gleaned from the results. The mean point scores for the 6 and the 7 year olds, respectively, were  $1.4 \pm 0.15$  and  $2.0 \pm 0.26$ ; their standard deviations were 0.8 and 1.5. Kohs<sup>19</sup> gives 4 points as the score corresponding to a mental age of 6 years 6 months, and 8 points as the score for 7 years 6 months. It will be remembered that on the Stanford-Binet and the Otis tests, the subjects of this study of these two ages made decidedly favorable showings. It seems, then, that regardless of good general intelligence, as measured by our most reliable tests, the 6 and 7 year old negroes give evidence of inability to handle the block designs. The 2 point score obtained by the 7 years 6 months children coincides with what Kohs considers the norm for 6 years 0 months; and while the 6 years 6 months subjects in the present study average 1.4 point, Kohs makes 1 point the norm for 5 years 7 months.

The remainder of the 201 children who were given the Kohs test were the older ones, most of whom were examined because of inferior scores in the group test; and it is obviously unfair to consider results obtained from such subjects as typical of racial performance. Such evidence as was obtained about the interrelations of the factors of age, Otis score, and Kohs points with the group studied and by means of a regression equation<sup>20</sup> affords *predictions* of the *most probable* Kohs score, the other two factors being held constant. That is, knowing the means and the standard deviations of each of the three factors in question, as well as their intercorrelations, what children of a given age and given score on the Otis would *most probably* average on the block designs can be computed. The ages 8, 10, and 12 have been taken, and for each age the score on the Otis primary which was found (see Table 4) to be the average for that particular age the corresponding predictions for the Kohs have been computed. The predicted block-designs scores are as follows: 8 years, 3.3 points; 10 years, 6.1 points; 12 years, 8.6 points. This means that for children of an average age of 8 years 6 months, whose work on the Otis primary test is average for this age, and who therefore are *not*

<sup>19</sup> Ibid, p. 73.

<sup>20</sup> T. L. Kelley's regression equation for three variables is:

$$X_1 = r_{12} \frac{\sigma_1}{\sigma_2} X_2 + r_{13} \frac{\sigma_1}{\sigma_3} X_3$$

the selected inferiors that the actual present subjects were, the most probable score on the Kohs test would be 3.3 points. It must be emphasized that these figures can not be presented with the finality, and must not be accepted with the confidence, that more strictly empirical data (objectively obtained measures) would justify. All they tell is that, in the light of the present data, the mutual interrelations of the factors considered afford the belief that the predicted scores indicate the general trend and are the most probable averages. With this word of warning about their interpretations, the results yielded by the regression equation may be considered briefly.

When these predicted scores for 8, 10, and 12 year old children are compared with Kohs's norms for each of these mid-year points, the discrepancies are somewhat startling. The predictions made for these ages are, in order, 3.3, 6.1, and 8.6; Kohs's norms are 14, 30, 54.

Comment concerning the writer's findings with Chinese children on this test may be of interest.<sup>21</sup> Sixty-three Chinese 12-year olds made an average of 65.4 points on this test. This score, the mental age equivalent of 13 years 4 months, surpasses their average Binet mental age (11 years 5 months) and even their chronological age (12 years 6 months). The Chinese apparently show a special facility in handling this type of problem—one which is beyond both their Binet performance and the American average for children of their years—whereas the negroes in the group under study showed a marked disability in this line of work, their scores herein being inferior to white norms and to their own records in verbal tests. Here, apparently, is a measure of racial differences, though just what the true significance of the measure is would be more difficult to say.

It will be remembered that Kohs test bore a higher correlation with the Stanford-Binet age constant than did either of the other performance tests used with this negro group. The coefficient (0.37), while very good for the correlation of a verbal with a performance test, is not high as test intercorrelations between verbal tests generally run, and is lower than the correlation between block designs and Binet (0.49) in the case of the Chinese 12-year olds referred to, and lower than the similar correlation coefficient (0.83) obtained by Kohs in the case of 366 American white children. It must be concluded, then, that while the negro's ability to solve the block designs is slightly concomitant with general intelligence as measured by other and surer means, his block-design ability lags decidedly behind his general ability and indicates a special racial inferiority in the factors that contribute to success at this type of work.

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<sup>21</sup> Graham, Virginia Taylor: The Intelligence of Chinese Children in San Francisco. *Journal of Comparative Psychology*, Vol. VI, No. 1, 1926, pp. 55-56.

## 3. THE LINCOLN HOLLOW SQUARE TEST

This test consists of eight problems, of the form board type, which vary in difficulty. The scoring in this investigation, in terms of number of problems solved within one minute, and of average seconds per problem, has already been described.

As with the Kohs test, the objective data for unselected 6 and 7 year olds (37 and 33 cases, respectively), can be given, but they must be confined to predictions obtained from regression equations for the higher ages. Table 10 gives these figures.

TABLE 10.—*Scores on Lincoln hollow-square test—Atlanta negro children*

## A. ACTUAL MEASURE

Age	Cases	Number of problems solved		Average number of seconds per problem	
		Means	Standard deviation	Means	Standard deviation
6.....	37	4.5±0.13	1.2	55±1.17	11
7.....	33	4.9±.19	1.6	62±1.55	13

## B. PREDICTIONS

## 1. AGE AND OTIS PRIMARY CONSTANT

8.....		5.3		48	
10.....		6.2		39	
12.....		7.1		31	

## 2. AGES AND OTIS ADVANCED CONSTANT

11.....		5.4		47	
12.....		6.0		40	

There is little or nothing with which these results may be compared. The originators of the test give data<sup>22</sup> from only 35 children, and nothing is known about their selection of cases. There were seven 6-year olds, and seven 7-year olds among their subjects. The median total time (and in calculating total time each incomplete problem is given a score of 60 seconds, instead of 90 as was used in computing the average seconds per problem) is 165 seconds for the 6-year group and 170 for the 7-year. This is obviously very inadequate for a comparison, but it seems to indicate that Lincoln's subjects did better than those of this study—both with respect to number of problems solved and to time of solving.

Referring again to Tables 7 and 8, it will be recalled that the Lincoln test had a fairly satisfactory correlation with verbal tests of intelligence and with age. The coefficients seem to indicate that the time

<sup>22</sup> Op. cit. pp. 56-59.



measure is a better index than is the number of problems, though the latter seems satisfactory with younger children.

With reference to the predicted scores, holding constant the Otis primary gives results that are more favorable to the negro than does distributing the Otis advanced; and since the "primary" group is less weighted with retarded cases, it is probably no more than fair to accept these better scores as being the more nearly correct.

On the Lincoln test, the present subjects seemed to do better at each successive age, both with respect to the number of problems solved and to the time of solving them. The test correlates to some extent with verbal intelligence tests, but not with the Healy construction A. There are available no comparable data on which to base an estimate of how well or how poorly the negro children do on the test, with reference to the accomplishment of children of any other race.

#### 4. HEALY CONSTRUCTION A

As has been pointed out previously, the time required for the first solution of the Healy A seems to be completely unrelated to any of the other tests or measures, so far as this negro group is concerned. The total time of the five trials, however, does bear some relationship to accomplishment in the verbal tests, and a marked one in the case of the Otis advanced. Unfortunately, all the comparable data available are in terms of time on the first trial, which, it is felt, is a psychologically unknown measure, perhaps influenced largely by chance. Children have often been seen to solve the puzzle comparatively quickly the first time, only to fail or take an inordinately long time on succeeding trials. The total time for five trials seems to be a more significant index.

As Pintner and Paterson<sup>23</sup> point out, there has been some disagreement in the norms offered by several investigators. Their own are probably the best basis of comparison, since, aside from being derived from a comparatively large number of cases (1,005), they are the ones that are most generally accepted. Despite great variability in individual performances at all ages, their medians<sup>24</sup> show a steady decrease with age. As might be expected with data selected as in the case in this study, the actual medians of the group under study are most erratic, so again resort is had to predicted averages as the safest indication of performance. Table 11 gives the best that is afforded in the way of racial comparisons on this test.

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<sup>23</sup> *Op. cit.*, pp. 44-53, 122-126.

<sup>24</sup> *Ibid.*, p. 123.



TABLE 11.—*Predicted scores of Atlanta negro children, compared with white norms on Healy construction A test*

NEGROES—AGE AND OTIS SCORE CONSTANT—PREDICTION					
Age.....	Primary test			Advanced test	
	8	10	12	11	12
Time: First trial.....	129	120	112	128	124
Total time.....	263	229	200	267	228

WHITE NORMS—MEDIAN—PINTNER AND PATERSON					
Time: First trial.....	117	70	46	-----	-----

Again preference is given to the predictions based on the Primary rather than on the Advanced examination; they are more favorable to the group. With reference to time on the first trial, these figures indicate the white to be more successful in the solution of this problem. The scores of the two races are closer together at the lower ages.

Little can be said about the significance of this test. Just what factors are involved in this type of problem solving it would be difficult to say; "appreciation of form-space relationships" and "psycho-motor ability," are somewhat vague phrases, and it would be reverting to an outgrown "faculty psychology" if attempt were made to extract herefrom the indicators of more specific "abilities." Nor is there objective criteria to indicate the practical or industrial aptitudes of which the test is a measure. When the five trials are used, and the problem becomes a learning test, still other psychological elements are introduced; but further and fuller analysis is needed to determine the value of the form board as a prediction of social or economic adequacy, either general or specific.

#### IV. Summary and Conclusions

In this study no pretense is made of having adequately analyzed negro intelligence from the qualitative standpoint. Nor is it believed that any of these tests are magic or infallible indicators of the thing called general intelligence. A clinician is only too well aware of the distorting influence of the conditions known as "attitudes" and "interests"; and intelligence, in itself, remains too much of an unknown quantity to be dogmatized about. This study has been based upon results obtained from the use of a group test (Otis) that is generally accepted as a good measure of general ability, of an individual test (Stanford Binet) that is conceded to be the most accurate and dependable measuring rod, and upon several performance tests (Kohs block design, Lincoln hollow square, and Healy

construction A), about the specific indications of which less can be said with definiteness.

The ideal procedure in such a racial investigation would seem to be, of course, to compare groups of white and negro children that had been subjected to the same social and educational influences, that is, to measure test performance, experience being held constant. Such a method is, however, practically impossible. Comparisons have, therefore, been based upon norms secured from large numbers of white children in various parts of the country, and an attempt has been made to eliminate such factors as seemed, *a priori*, to put the negro at a disadvantage. Moreover, considering the probable discrepancy in status between the white and the negro children compared in this paper, the comment may be pertinent as to whether, had their environments been the same, the selected groups would not have been as representative of the respective races as are the ones used.

Taking the results "behavioristically," without any over-interpretations, as objective data accumulated through the scientific method of "controlled stimulus and measured response," the comparative records of the races are significant. The results found in the present study may be summarized briefly as follows:

1. On various mental tests the negro children, except at early ages, made averages that are lower than the averages of white children.
2. The discrepancy in test scores between the races increases with age, after the sixth year, and becomes quite marked by the eleventh year.
3. Variability of performance within each of the races was found, as many investigators state, to be greater than the difference between the two. The differences between the averages are reliable, however, and are constant in direction.
4. In most instances greater variability of performance is shown among the whites than among the colored. This increases the probability of extreme cases in the former race; and since their means are generally higher, it increases the probability of superior scores. The negro group, on the other hand, tends to hang a little closer around their lower average.
5. On tests of special performance—nonverbal tests and specific parts of verbal scales—the negro children seem to do better at rote and practical tasks than at those that involve behavior which may roughly be described as discriminating, analytical and critical.
6. There seems to be little, if any, real disagreement between the results and conclusions from other related studies and those from the present study, though no attempt has here been made to

review adequately or to analyze the complete literature that is available on this subject.

No attempt is made to state the ultimate significance of these test results. Probably no one is in a position adequately to define and analyze intelligence; and the real value of many of the measures thereof is still a debatable question. The only justifiable claim of mental testing is the pragmatic one of furnishing a reliable prediction of general social and economic efficiency. The science rests upon an empirical foundation; and correctly standardized tests, though they may not differentiate and analyze endo-psychic factors, have been found to provide a basis for predictions of social and economic adequacy that have undeniable reliability.

## Appendix

## OTIS INTELLIGENCE TESTS BY PERCENTILE RANK

Number of children in each grade and of each age, classified according to percentile rank—Unselected negro school children in Atlanta, Ga., 1925-26

Age	Grade	0-0.49	0.50-0.99	1.0-4.99	5.0-9.9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-	Total
6.	1								2	1	1	1		2	1	4	6	1	5	2	2	1	1	29
	2									1			2	6	3	3	3	1	4	3	3	1	1	29
	3																					1	1	
Total									2	1	1	2	2	8	1	7	9	2	9	5	5	3	2	59
7.	1									2	2	1	1	2	2	2	2	1	3	2	1	1		22
	2				2	6	13	8	6	5	10	2	8	11	15	15	8	13	6	7	7	5	155	
	3						1	1		2	2	2	5	3	1	2	3	3	5	1	2	3	4	36
	4																				1	1	2	
Total					2	6	14	9	6	7	14	3	14	16	18	19	20	12	21	9	11	10	4	215
8.	1				1	21	1	1	2	1		1	2			1		1						11
	2			9	18	19	5	17	11	21	5	6	6	10	7	6	5	3	4	4	2	1		192
	3			1	2	8	5	9	6	4	4	11	10	5	8	7	4	5	4	3	3	3		104
	4				1			3		1	3	1	1	1	1	1	4	1	3	6	1	1		28
	5																		1				2	
Total				10	22	29	25	30	30	18	26	13	20	21	13	16	16	9	13	14	6	6		337
9.	1								1	1	1	3				2	1							3
	2			24	20	24	10	10	5	3	3	2	1	2		2	1			1				121
	3			14	16	17	18	15	13	9	9	7	10	8	2	5	2	3	1	1				153
	4				6	8	4	5	10	6	6	3	6	10	5	3	2	4	2	2	1			89
	5			1		2		2	2	2	1			1	3	1	1				1	1		16
Total				39	42	51	32	32	33	26	20	12	17	21	10	11	6	7	3	4	1	2		382
10.	1																							6
	2			31	15	12	6	2	5															102
	3			35	15	19	2	6	8	4	1	1	1	2	1									106
	4			20	17	16	12	7	5	3	3	2	3	5	4	1	1	1	1	1	1			114
	5				6	9	4	7	7	8	3	1	4	1	2	3	3	1	1					57
	6			1		1			2	3	2			2	2	3	3	3	3	1		1	2	26
Total				88	83	58	24	23	25	22	10	4	9	13	10	5	5	1	5	2		1	3	411







## CURRENT WORLD PREVALENCE OF DISEASE

REVIEW OF THE MONTHLY EPIDEMIOLOGICAL REPORT ISSUED SEPTEMBER 15, 1926,  
BY THE HEALTH SECTION OF THE LEAGUE OF NATIONS' SECRETARIAT<sup>1</sup>

Additional information concerning the cholera outbreaks in China and other parts of the Far East during the spring and summer months is made available in the September Epidemiological Report, published at Geneva by the health section of the League of Nations' secretariat. While the epidemic at Shanghai, referred to in last month's report, declined during August (see table below), outbreaks were reported in Amoy and in Harbin, Manchuria, about the middle of



August; also a few cases occurred in Port Arthur and Dairen. A number of deaths from cholera were reported at Swatow in July, and rather serious outbreaks occurred at Hoihow on the island of Hainan, where 386 cases were reported in four weeks in May and 365 cases in four weeks in July. At Kwang-Chow-Wan the number of new cholera cases continued to increase during August, and 483 cases were reported as against 354 in July. In general the cholera situation in China gave cause for some anxiety at the beginning of the month of September.

<sup>1</sup> From the Office of Statistical Investigations, U. S. Public Health Service.

While current figures for China as a whole are unobtainable, of course, the information gathered by the National Epidemic Prevention Bureau at Peking from hospitals and practitioners of western medicine gives a good indication of the epidemic situation in the various Provinces. This information was available only up to April, but at that time cholera was said to be of frequent occurrence in the two southern coast Provinces of Kwang-tung and Fukien, but not to exist elsewhere. Notes from this source seem to indicate that, during the 12 months from May, 1925, to April, 1926, no Province of China was entirely free from cholera. The southern and central coast Provinces and the two inland Provinces of Kweichow and Hunan were most affected, while cases seem to have been rare in the western Provinces. On the accompanying map of China some indication of the prevalence of the disease in the various Provinces in 1925 and in the first four months of 1926 is given, and the towns where outbreaks were reported in the past summer have been underlined.

In southeastern Asia the cholera situation improved during the summer. In Siam 674 cases were reported in the whole country during the four weeks ended August 14, compared with 1,413 during the previous four weeks. In French Indo-China, where 722 cases were reported in August as compared with 1,768 in July, the situation showed marked improvement, and the principal ports were reported free from cholera.

The cholera deaths reported in India in the two weeks ending July 31 numbered 2,499, compared with 4,908 in the corresponding period of 1925. Western and northwestern India were practically free from cholera, and Bihar and Orissa and Madras Presidency showed the highest incidence. No unusual prevalence occurred in the Indian ports.

TABLE I.—Cholera cases reported in the principal maritime towns of the Far East from August 1 to September 11, 1926

Towns	Number reported in week ending—					
	August—			September—		
	7	14	21	28	4	11
Negapatam (deaths).....	3	5	5	0	0	1
Madras (deaths).....	1	0	0	0	1	0
Calcutta (deaths).....	11	5	9	10	13	13
Rangoon (deaths).....	1		0	1	0	0
Bangkok (cases).....	8	2	0	2	3	7
Saigon and Cholan (cases).....	1	0	0	0	0	0
Amoy (cases).....	0	2	11	16	38	53
Shanghai (cases).....	333	171	141	100	122	57
Port Arthur (cases).....	0	0	0	2	0	0
Dairen (cases).....	0	0	0	1	2	3
Yokohama (cases).....	0	0	0	1	0	0
Harbin (cases).....	0	36	98	66	46	27

*Plague.*—"Returns for August show a relative quiescence of plague in its principal centers, as is usual at this season," says the report. In the Mediterranean countries the only cases reported during the month were 4 at Constantinople, 2 in Greece, 2 in Algeria, 1 in Tunisia, and 1 in Egypt, at Alexandria.

In the Union of South Africa only 2 cases of plague were reported in August as against 11 in July. No cases have been reported from Tanganyika Territory since last November, and in Mauritius the one case reported during July was the first since last December. In Madagascar plague reached its lowest incidence during July with 16 cases, and an increase occurred in the first half of August when 30 cases were reported.

In Senegal and Uganda the incidence of plague has been higher than in the previous year. During May and June 321 cases were reported in Senegal, compared with 98 cases the corresponding period of 1925, which was, however, an unusually low year. In Uganda the number of cases was declining somewhat in July, but between January 1 and August 7, 1,128 cases had been reported compared with 470 cases during the corresponding period of the previous year.

Plague cases reported in India during the two weeks ending July 31 numbered 562 as against 490 in the corresponding two weeks last year; 179 cases were reported in Bombay Presidency, 91 in Madras Presidency, and 226 in Mysore.

In Java there were 139 deaths from plague in the four weeks ending July 17 as against 461 and 518 deaths, respectively, in the corresponding periods of 1925 and 1924.

In Siam only 1 case of plague was reported in July, and in French Indo-China there were 22 cases reported in July and 12 in August.

Japan reported 9 cases of plague in July, all in the Province of Kanagawa and 6 of them at Yokohama. There was no case in August.

*Yellow fever.*—The following cases of yellow fever were reported:

*Africa:*

Gold Coast—June, 2 cases, 1 death.

Nigeria—June, 1 case, 1 death.

*South America:*

*Brazil—*

Parahibo—April, 40 cases, 8 deaths.

Rio Grande del Norte—April, 50 cases, no deaths.

*Smallpox.*—The outbreak of smallpox which began early in the year in Japan evidently had come to an end in August, for only nine cases were reported in the first two weeks of the month. The total cases reported in the first seven months of the year numbered 1,219.

Smallpox was reported to be prevalent in all parts of China in March and April, and epidemics were indicated in the Provinces of

Chihli, Honan, Chekiang, Fukien, and Kweichow. "As elsewhere in the Northern Hemisphere," says the Report, "smallpox seems to be most prevalent in April, least in September."

The smallpox cases in European Russia, excluding the Ukraine, in April totaled 373 as against 1,060 in April, 1925, and 2,480 in April, 1924. Only 22 cases were reported in the Ukraine in April and 27 in May.

A marked seasonal decrease in smallpox occurred in England during July and August; 291 cases were reported during the four weeks ended August 14, compared with 585 during the previous four weeks.

A severe smallpox epidemic of virulent type was reported in July at Rio de Janeiro.

In the United States there were 592 cases reported by 38 States during the first fortnight of August, compared with 367 in the corresponding period of 1925.

*Dysentery.*—The prevalence of dysentery reported by European countries during August is summarized in the following paragraph taken from the Report:

Dysentery has, on the whole, been less prevalent in Central Europe during the past summer than in 1925. There were 616 cases in Germany during the four weeks ended August 28 as against 1,182 cases during the corresponding period of the previous year. Fifty-two cases were reported in July in Czechoslovakia and 145 cases in Hungary as compared with 127 and 211 cases, respectively, during the corresponding month of 1925. In the Kingdom of the Serbs, Croats, and Slovenes there were 236 cases in August, 1926, as against 301 cases in August, 1925. The disease was, on the contrary, somewhat more prevalent in Poland than in 1925: 1,437 cases were reported during the four weeks ending August 28 as against 1,049 cases during the corresponding period of the previous year. The returns for May for the Ukraine showed a slightly higher incidence than in 1925.

*Enteric fever.*—Although seasonal increases in enteric fever were evident for most European countries, the July incidence was lower than during the corresponding month of the previous two or three years in nearly all countries. "It would be premature, however, to draw any final conclusions, as yet, on the typhoid fever situation," says the Report, "since the maximum incidence of the disease rarely comes before September, frequently in October, and, at times, as late as November."

*Acute poliomyelitis.*—Both Germany and England reported more cases of poliomyelitis during July and the first two weeks of August than in the corresponding season of 1925, while the other countries



reporting on this disease showed a lower incidence than last year. A comparison of cases in the two years is given in the following table:

TABLE II.—Cases of poliomyelitis reported in various countries, 1925 and 1926

4-week period ending—	Germany		England and Wales		Italy		New Zealand		Month	Sweden		Denmark		France	
	1925	1926	1925	1926	1925	1926	1925	1926		1925	1926	1925	1926	1925	1926
Jan. 30.....	17	22	26	17	19	11	167	0	January.....	34	35	7	1	10	9
Feb. 27.....	22	14	23	20	19	13	409	4	February.....	20	13	14	3	18	9
Mar. 27.....	21	18	17	14	35	8	396	5	March.....	13	8	3	2	16	20
Apr. 24.....	18	18	12	14	26	12	197	4	April.....	13	12	1	2	17	13
May 22.....	25	22	16	17	26	25	62	0	May.....	12	8	2	1	11	11
June 19.....	18	21	15	23	68	28	40	0	June.....	13	10	4	3	8	8
July 17.....	20	57	17	26	80	42	14	1	July.....	13	17	9	3	15	20
Aug. 14.....	31	160	28	98	106	52	12	0	August.....	84	39	20	9	39	18

*Scarlet fever.*—The number of cases of scarlet fever in Poland has been increasing steadily since June, and in the week ending September 4, 1,138 cases were reported, more than twice the number in the corresponding week of 1925. In Germany an increase began in August, and at the end of the month the number of cases was greater than in any of the four preceding years. The weekly cases reported by these two countries are shown in the table below. No corresponding increase was noted in the reports from other European countries.

TABLE III.—Scarlet fever cases reported in Germany and in Poland from July 11 to September 4 of 1925 and 1926

Week ending—	Germany		Poland	
	1925	1926	1925	1926
July 17.....	695	733	393	533
July 24.....	612	714	392	506
July 31.....	685	690	383	614
Aug. 7.....	663	769	376	693
Aug. 14.....	607	826	313	645
Aug. 21.....	782	978	387	804
Aug. 28.....	778	1,008	500	939
Sept. 4.....	806	1,151	437	1,138

### WHAT PRICE SMALLPOX <sup>1</sup>

By CHARLES V. CHAPIN, M. D., Superintendent of Health, Providence, R. I.; President American Public Health Association

During the last 15 years there have been over 700,000 reported cases of smallpox in the United States. Last year, 1925, there were 39,639 cases. These 39,000 cases were more than occurred in any country furnishing statistics, except India. Even Soviet Russia,

<sup>1</sup> Quoted from the Weekly Bulletin of the Bureau of Public Health of New Mexico, dated Nov. 16, 1926.

with a larger population, had only half as many cases. The 8,000 deaths in Mexico suggest that the cases in that country were probably proportionally more numerous than in the United States, but actual statistics are lacking. What becomes of our boasted superiority in public health when we are more widely infected with the most loathsome of the contagious diseases than is any other country, but Mexico, and when we have to admit our inferiority to the Soviet Republic. This state of things is no chance event of one year. For 15 years and longer we have had more smallpox than any country in western Europe; indeed, generally more than the whole of western Europe. In 1921 we had reported over 100,000 cases of this disease.

Some people are saying, "Suppose we do have a lot of smallpox; what of it? It is a very mild type of the disease. It never kills anybody. I had rather have it than vaccination. With modern sanitation and our cleanly habits the old loathsome smallpox has become extinct."

Has the reader ever seen a case of "mild smallpox"? If he has, certainly if "*she*" has, neither would ever prefer it to vaccination. A year ago there was an outbreak of some 50 cases of mild smallpox in the vicinity of Providence. Out of the kindliness of our hearts we took four of the patients into our city hospital. They all had backache, headache, and some fever for a few days. They then felt better and could sit up. The bodies, and especially the faces, of all were covered with pustules. They were almost thick enough to run together. We counted nearly 2,000 on one man. In about three weeks they had turned into brown crusts and had dried up and fallen, leaving brownish spots to last for half a year. There were no deaths, so this was classed as an outbreak of the mild type. I prefer a successful vaccination.

It is all nonsense about the old-fashioned severe type of smallpox being extinct. It still exists in various parts of the world, in India, in China, in Mexico, in Russia, and in other places. It has in recent years invaded the United States, from Japan, from Europe, from Africa, and most frequently of all from Mexico. In 1923 Detroit was experiencing an outbreak of mild smallpox. Nobody died: The health department did valiant work but received scant support. People would not be vaccinated. The disease dragged on. Then, in January, 1924, a case of virulent smallpox came from Canada. People began to die. They lived sometimes only two or three days. The public became alarmed. They began to back up Doctor Vaughan, the health officer. He vaccinated over 500,000 in a month. The disease was stamped out, but not until 163 persons had been placed in their graves. Virulent smallpox from the same source was carried to Minnesota. In Minneapolis it caused 1,298 cases with 63 deaths. Doctor Chesley traced it to 147 localities, and the average

fatality was 25 per cent. In Washington, D. C., in 1925 there were 59 cases with 20 deaths. During the first quarter of this year there were, in Los Angeles, 812 cases with 136 deaths. Virulent smallpox is still with us. It is as cruel a disease as in the olden times. When there is no smallpox people say, "Why should we worry? Why should we be vaccinated?" That is what the 136 Los Angeles victims said last year. Now it is too late.

How many people are saying the same thing this year? What price will they pay? Intelligence and vaccination, or indifference and smallpox? Every physician and every board of health is ready to vaccinate you now, before it is too late. Have you consulted them as yet? If not, do it now.

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### **Opinion of Attorney General of Tennessee Regarding Authority of Municipal Health Officers Outside of Corporate Limits**

Sections 3101 (being section 7 of chapter 98, Laws of 1877) and 3102 (being chapter 28 of the Laws of 1877) of Thompson's Shannon's Code of Tennessee, 1918, read as follows:

SEC. 3101. Every municipality throughout the State having 5,000 inhabitants and over shall organize a properly constituted board of health, which, in addition to their duties as such local boards, shall also make monthly, quarterly, semi-annual, and annual reports to and in accordance with such form and instructions as said State board of health may prescribe, and also shall make special reports whenever required.

SEC. 3102. The boards of health established in the various cities and towns of the State shall have the same jurisdiction and authority to do all acts in the territory extending one mile from the corporation line, in any direction, that they have within the corporation; but the jurisdiction herein conferred shall not extend beyond the limits of the county in which any city or town is situated and if two cities lie nearer than two miles of each, the jurisdiction in distance shall be divided between them.

In response to a request by the State commissioner of public health relative to the authority of city and town health officers beyond the limits of their respective municipalities, the attorney general of Tennessee rendered the following opinion:

(1) The provision of section 7, chapter 98, acts of 1877, is valid, and boards of health established in cities and incorporated towns may exercise their authority in the territory extending a mile from the corporate limits. Ordinarily this must be preceded by ordinance establishing a board of health and providing for the territory specified, unless the municipality is operating under some special charter or act of the legislature.

(2) The law provides that there shall be no conflict in authority between city and county health officers. They must act in conjunction and harmoniously in the territory over which each has jurisdiction.

## PUBLIC HEALTH ENGINEERING ABSTRACTS

**B. coli as Index of Faecal Pollution of Water Supplies.** D. A. Bardsley. *J. of Hyg.* 1926, vol. 25, pp. 11-25 (52 refs.). (Abstracted by W. W. C. Topley.) From *Bulletin of Hygiene*, vol. 1, No. 9, September, 1926, pp. 735-736.

This paper contains a careful and adequate review of the criteria which have, from time to time, been advocated for the identification of *B. coli*, as a bacterial group, the presence of which in a sample of water affords evidence of excretal contamination. Particular attention is paid to the methyl-red and Voges-Proskauer tests as differentiating between *B. coli* of faecal origin and *B. aerogenes*, the normal habitat of which is usually regarded as being grasses, grain, and fertile soil. A useful summary is given in tabular form of the evidence on which this view is based. The author then records the results obtained in the examination of 525 samples of water, in which these tests were applied in addition to those usually included in a bacterial analysis. Of these samples 262 contained a coliform bacillus which fermented lactose with the production of acid and gas, failed to liquefy gelatine, and produced a clot in milk. In the case of 15 of these samples, however, all the coliform bacilli submitted to confirmatory tests gave a negative methyl-red reaction and a positive Voges-Proskauer reaction, and should therefore be classed as *B. aerogenes*. It would thus appear that in 5.7 per cent of the cases, in which *B. coli* would have been reported as present by the ordinary tests, the organism actually isolated should not have been regarded as affording evidence of excretal contamination.

(There seems reason for believing that a more adequate differentiation of those bacilli which the sanitary bacteriologist groups together as *B. coli* is a far more serious problem in the Tropics than it is in this country. See report by Pawan, *Bulletin of Hygiene*, v. 1, p. 26.)

**Small Sewage Tanks.** E. F. Longley, Commonwealth of Australia. Dept. Health Service Pub. (Div. San. Eng.), No. 1, 22 pp. (n. d.) Melbourne. (Abstracted by W. W. Jameson.) From *Bulletin of Hygiene*, vol. 1, No. 2, February, 1926, pp. 155-156.

This report is really an analysis of the records of 38 small sewage tank installations in Australia. Such installations, while of value for residences and institutions, are not a satisfactory substitute for water-carried sewage systems for communities. Their efficiency may be judged by their freedom from nuisance and objectionable odors and by a long-continued operation without clogging by solids. There is insufficient information available regarding the chemical and bacteriological results obtained.



The majority of the tanks under review contained two or more chambers, but no advantage appears to be gained by dividing tanks into compartments. Such tanks, usually rectangular in shape, should be capable of holding about 24 hours' normal flow or 20 to 100 gallons per head of the population dealt with. Shallow tanks appear to work as satisfactorily as deep tanks. All tanks and drains require periodical cleaning, although one tank is noted as having been in continuous operation for 5 years, 2 for 4 years and 2 for 3 years. In 11 cases where results were not held to be satisfactory, complaints were made either of bad odors or of clogging by solids. Clogging is due usually either to faulty construction or to lack of skilled supervision.

If the disposal of the tank liquor is safe and thorough, sullage waters may with advantage be put through the tanks along with domestic sewage. In any event grease, disinfectants, very hot water, and storm water should be excluded.

In 15 installations oxidizing filters, commonly built of stone, were used for the treatment of tank liquors. These filters may cause nuisance from bad smells and from clogging by solids. They should be ample in capacity, and distribution of the tank liquors must be uniform. Grease is hostile to their good working.

The disposal of the final effluent should be a matter of some concern. If a relatively large volume of water or a highly porous soil is available, no trouble may result, but heavy impervious land is unsuitable for the disposal of these liquids. Care should be taken to avoid the ponding up of putrescible effluents in surface drains. It is not safe to assume that such effluents are pure and innocuous, and where they can not be disposed of without risk of contact with human beings they must be regarded as possible sources of infection.

### DEATHS DURING WEEK ENDED NOVEMBER 20, 1926

*Summary of information received by telegraph from industrial insurance companies for week ended November 20, 1926, and corresponding week of 1925. (From the Weekly Health Index, November 24, 1926, issued by the Bureau of the Census, Department of Commerce)*

	Week ended Nov. 20, 1926	Corresponding week, 1925
Policies in force.....	66, 011, 115	62, 149, 737
Number of death claims.....	12, 939	11, 965
Death claims per 1,000 policies in force, annual rate	10. 2	10. 0



Deaths from all causes in certain large cities of the United States during the week ended November 20, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925. (From the weekly Health Index, November 24, 1926, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Nov. 20, 1926		Annual death rate per 1,000 corresponding week, 1925	Deaths under 1 year		Infant mortality rate, week ended Nov. 20, 1926 <sup>1</sup>
	Total deaths	Death rate <sup>1</sup>		Week ended Nov. 20, 1926	Corresponding week, 1925	
Total (65 cities).....	6,930	12.6	12.5	732	730	8.59
Akron.....	43			8	6	86
Albany.....	33	14.5	15.5	4	5	83
Atlanta.....	67			6	3	
White.....	36			5	1	
Colored.....	31	( <sup>2</sup> )		1	2	
Baltimore.....	225	14.5	14.3	15	21	46
White.....	174			10	15	38
Colored.....	51	( <sup>2</sup> )		5	6	80
Birmingham.....	56	13.8	18.5	12	10	
White.....	28			6	3	
Colored.....	28	( <sup>2</sup> )		6	7	
Boston.....	217	14.4	15.5	25	35	70
Bridgeport.....	24			2	5	34
Buffalo.....	147	14.1	14.3	27	21	113
Cambridge.....	24	10.3	14.4	0	3	0
Camden.....	42	16.7	13.4	5	2	84
Canton.....	15	7.1	12.8	4	7	88
Chicago.....	646	11.1	11.3	59	63	52
Cincinnati.....	134	17.0	16.3	12	10	75
Cleveland.....	186	10.1	10.9	18	21	47
Columbus.....	69	12.6	14.0	9	6	84
Dallas.....	61	15.9	15.4	9	13	
White.....	43			5	11	
Colored.....	18	( <sup>2</sup> )		4	2	
Dayton.....	39	11.5	10.6	5	3	78
Denver.....	82	15.0	13.7	8	8	
Des Moines.....	31	11.1	10.3	3	2	70
Detroit.....	250	10.5	12.4	35	53	50
Duluth.....	29	13.4	12.7	3	1	57
El Paso.....	30	14.4	11.9	8	4	
Erie.....	19			4	1	82
Fall River.....	32	12.7	13.3	1	8	16
Flint.....	24	9.1	5.2	2	4	34
Fort Worth.....	26	8.5	7.2	4	3	
White.....	24			3	2	
Colored.....	2	( <sup>2</sup> )		1	1	
Grand Rapids.....	32	10.7	11.6	2	6	29
Houston.....	56			4	4	
White.....	36			4	4	
Colored.....	20	( <sup>2</sup> )		0	0	
Indianapolis.....	98	13.9	15.3	12	4	61
White.....	87			8		70
Colored.....	11	( <sup>2</sup> )		4		229
Jersey City.....	64	10.5	11.4	4	10	30
Kansas City, Kans.....	39	17.4	11.7	4	2	78
White.....	31			3	2	67
Colored.....	8	( <sup>2</sup> )		1	0	152
Kansas City, Mo.....	103	14.3	15.5	11	12	
Los Angeles.....	259			15	19	42
Louisville.....	84	14.1	9.3	5	4	43
White.....	69			4	3	39
Colored.....	15	( <sup>2</sup> )		1	1	70
Lowell.....	28			3	6	58
Lynn.....	15	7.5	10.1	6	0	159
Memphis.....	68	20.0	19.4	6	6	
White.....	28			3	2	
Colored.....	40	( <sup>2</sup> )		3	4	
Milwaukee.....	115	11.6	9.7	12	10	57
Minneapolis.....	97	11.7	11.3	6	13	33

<sup>1</sup> Annual rate per 1,000 population.

<sup>2</sup> Deaths under 1 year per 1,000 births. Cities left blank are not in registration area for births.

<sup>3</sup> Data for 63 cities.

<sup>4</sup> Deaths for week ended Friday, Nov. 19, 1926.

<sup>5</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Norfolk, 38; Richmond, 32; and Washington, D. C., 25.

Deaths from all causes in certain large cities of the United States during the week ended November 20, 1926, infant mortality, annual death rate, and comparison with corresponding week of 1925—Continued

City	Week ended Nov. 20, 1926		Annual death rate per 1,000 corresponding week, 1925	Deaths under 1 year		Infant mortality rate, week ended Nov. 20, 1926
	Total deaths	Death rate		Week ended Nov. 20, 1926	Corresponding week, 1925	
Nashville <sup>1</sup>	63	24.0	17.6	5	5	—
White	34			3	2	—
Colored	29	( <sup>1</sup> )		2	3	—
New Bedford	31			3	5	52
New Haven	32	9.2	11.7	6	3	82
New Orleans	149	18.5	17.6	18	17	—
White	91			10	10	—
Colored	58	( <sup>1</sup> )		8	7	—
New York	1,384	12.2	11.3	135	141	55
Bronx Borough	169	9.8	8.5	15	10	50
Brooklyn Borough	469	10.9	9.8	50	64	51
Manhattan Borough	565	15.7	15.9	61	56	68
Queens Borough	139	9.5	7.2	7	7	32
Richmond Borough	42	15.3	12.4	2	4	35
Newark, N. J.	93	10.6	10.9	11	11	63
Norfolk	26	7.8	12.0	3	3	61
White	15			1	2	33
Colored	11	( <sup>1</sup> )		2	1	106
Oklahoma City	31			7	2	—
Omaha	57	13.8	12.8	3	2	32
Paterson	36	13.1	9.6	3	0	51
Philadelphia	530	13.8	13.2	52	48	69
Pittsburgh	158	12.9	12.7	24	12	80
Portland, Oreg.	61			4	1	40
Providence	58	11.0	10.3	5	8	42
Richmond	55	15.2	16.8	8	5	100
White	33			4	1	78
Colored	22	( <sup>1</sup> )		4	4	139
Rochester	63	10.2	12.7	6	5	48
St. Louis	239	15.0	14.2	26	6	—
St. Paul	50	10.5	10.0	5	2	44
Salt Lake City <sup>1</sup>	36	14.1	12.7	1	2	15
San Antonio	57	14.5	13.2	7	12	—
San Diego	28	13.3	14.8	0	3	0
San Francisco	118	10.9	11.6	8	10	48
Schenectady	13	7.3	11.2	3	2	86
Seattle	61			2	3	19
Somerville	17	8.9	13.2	2	5	57
Spokane	38	18.2	13.9	4	0	93
Springfield, Mass.	36	12.9	16.1	3	5	46
Syracuse	56	15.9	14.3	7	2	89
Tacoma	28	13.8	10.0	3	2	71
Toledo	60	10.6	12.0	10	8	96
Trenton	51	19.8	11.1	9	4	153
Utica	26	13.2	15.4	1	6	23
Washington, D. C.	142	14.0	15.0	15	10	86
White	91			9	8	75
Colored	51	( <sup>1</sup> )		6	2	109
Waterbury	18			5	1	118
Wilmington, Del.	22	9.3	9.4	2	5	44
Worcester	37	10.0	12.3	4	8	48
Yonkers	24	10.8	11.9	2	1	45
Youngstown	26	8.2	11.4	5	7	63

<sup>1</sup> Deaths for week ended Friday, Nov. 19, 1926.

<sup>2</sup> In the cities for which deaths are shown by color, the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Louisville, 17; Memphis, 38; Nashville, 36; New Orleans, 26; Norfolk, 38; Richmond, 32; and Washington, D. C., 25.

# PREVALENCE OF DISEASE

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## UNITED STATES

### CURRENT WEEKLY STATE REPORTS

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers

#### Reports for Week Ended November 27, 1926

ALABAMA		ARKANSAS—continued	
	Cases		Cases
Cerebrospinal meningitis.....	2	Mumps.....	7
Chicken pox.....	21	Pellagra.....	2
Dengue.....	1	Scarlet fever.....	21
Diphtheria.....	72	Smallpox.....	1
Influenza.....	66	Tuberculosis.....	8
Malaria.....	41	Typhoid fever.....	16
Measles.....	10	Whooping cough.....	38
Mumps.....	6		
Ophthalmia neonatorum.....	1	CALIFORNIA	
Pellagra.....	5	Cerebrospinal meningitis—Los Angeles.....	2
Pneumonia.....	35	Chicken pox.....	273
Scarlet fever.....	25	Diphtheria.....	199
Smallpox.....	7	Influenza.....	18
Tetanus.....	2	Measles.....	552
Trachoma.....	3	Mumps.....	188
Tuberculosis.....	63	Poliomyelitis:	
Typhoid fever.....	24	Long Beach.....	1
Typhus fever.....	2	Los Angeles County.....	1
Whooping cough.....	61	Scarlet fever.....	238
		Smallpox.....	9
ARIZONA		Tuberculosis.....	191
Chicken pox.....	2	Typhoid fever.....	10
Diphtheria.....	4	Whooping cough.....	52
Measles.....	10		
Scarlet fever.....	21	COLORADO	
Tuberculosis.....	7	Chicken pox.....	29
Typhoid fever.....	1	Diphtheria.....	7
		German measles.....	1
ARKANSAS		Influenza.....	2
Chicken pox.....	22	Measles.....	5
Diphtheria.....	7	Pneumonia.....	3
Hookworm disease.....	2	Scarlet fever.....	68
Influenza.....	68	Smallpox.....	20
Malaria.....	22	Tuberculosis.....	14
Measles.....	3	Typhoid fever.....	4
		Whooping cough.....	3

CONNECTICUT		ILLINOIS—continued	
	Cases		Cases
Chicken pox.....	111	Mumps.....	55
Diphtheria.....	25	Pneumonia.....	244
German measles.....	1	Poliomyelitis:	
Influenza.....	2	Cook County.....	2
Measles.....	32	Peoria County.....	1
Mumps.....	4	Scarlet fever.....	234
Pneumonia (broncho).....	20	Smallpox.....	3
Pneumonia (lobar).....	25	Tuberculosis.....	276
Scarlet fever.....	44	Typhoid fever.....	41
Septic sore throat.....	1	Whooping cough.....	204
Tuberculosis (pulmonary).....	37		
Typhoid fever.....	1		
Whooping cough.....	52		
DELAWARE		INDIANA	
Chicken pox.....	3	Chicken pox.....	74
Pneumonia.....	2	Diphtheria.....	83
Scarlet fever.....	10	Influenza.....	21
Tuberculosis.....	6	Measles.....	47
Typhoid fever.....	1	Pneumonia.....	18
Whooping cough.....	2	Scarlet fever.....	117
		Smallpox.....	143
		Tuberculosis.....	38
		Typhoid fever.....	16
		Whooping cough.....	77
FLORIDA		IOWA	
Chicken pox.....	6	Cerebrospinal meningitis.....	1
Diphtheria.....	50	Chicken pox.....	72
Influenza.....	1	Diphtheria.....	32
Malaria.....	3	Measles.....	9
Measles.....	5	Mumps.....	3
Mumps.....	1	Pneumonia.....	3
Pneumonia.....	1	Scarlet fever.....	51
Scarlet fever.....	15	Smallpox.....	3
Smallpox.....	14	Tuberculosis.....	5
Tuberculosis.....	20	Typhoid fever.....	1
Typhoid fever.....	5	Whooping cough.....	4
Typhus fever.....	1		
Whooping cough.....	8		
GEORGIA		KANSAS	
Chicken pox.....	26	Cerebrospinal meningitis:	
Conjunctivitis (acute).....	2	Dearing.....	1
Diphtheria.....	58	Topeka.....	1
Dysentery.....	2	Chicken pox.....	91
Influenza.....	50	Diphtheria.....	18
Malaria.....	22	Influenza.....	9
Measles.....	6	Measles.....	154
Mumps.....	7	Mumps.....	4
Pellagra.....	1	Pneumonia.....	31
Pneumonia.....	40	Poliomyelitis—Lorraine.....	1
Scarlet fever.....	12	Scarlet fever.....	91
Septic sore throat.....	11	Smallpox.....	12
Smallpox.....	16	Trachoma.....	1
Tuberculosis.....	22	Tuberculosis.....	33
Typhoid fever.....	15	Typhoid fever.....	6
Whooping cough.....	49	Whooping cough.....	55
ILLINOIS		LOUISIANA	
Cerebrospinal meningitis—Cook County.....	3	Diphtheria.....	43
Chicken pox.....	467	Influenza.....	12
Diphtheria.....	129	Malaria.....	9
Influenza.....	24	Measles.....	20
Lethargic encephalitis:		Pneumonia.....	38
Cook County.....	1	Poliomyelitis.....	1
Fulton County.....	1	Scarlet fever.....	18
Montgomery County.....	1	Smallpox.....	9
Measles.....	480	Tuberculosis.....	34
		Typhoid fever.....	12

MAINE		MINNESOTA	
	Cases		Cases
Chicken pox.....	82	Chicken pox.....	278
Diphtheria.....	1	Diphtheria.....	87
German measles.....	2	Dysentery.....	3
Influenza.....	2	Measles.....	91
Measles.....	105	Pneumonia.....	3
Mumps.....	1	Scarlet fever.....	216
Paratyphoid fever.....	1	Smallpox.....	9
Pneumonia.....	16	Tuberculosis.....	30
scarlet fever.....	47	Typhoid fever.....	3
Tuberculosis.....	5	Whooping cough.....	15
Typhoid fever.....	2		
Vincent's angina.....	1	MISSISSIPPI	
Whooping cough.....	23	Diphtheria.....	30
		Scarlet fever.....	18
MARYLAND <sup>1</sup>		Smallpox.....	6
Cerebrospinal meningitis.....	1	Typhoid fever.....	3
Chicken pox.....	110		
Diphtheria.....	49	MISSOURI	
Dysentery.....	1	(Exclusive of Kansas City)	
German measles.....	1	Chicken pox.....	40
Impetigo contagiosa.....	4	Diphtheria.....	43
Influenza.....	17	Epidemic sore throat.....	3
Lethargic encephalitis.....	1	Influenza.....	23
Malaria.....	1	Measles.....	51
Measles.....	21	Mumps.....	3
Mumps.....	15	Pneumonia.....	1
Pneumonia (broncho).....	37	Scarlet fever.....	135
Pneumonia (lobar).....	56	Smallpox.....	1
Scarlet fever.....	43	Trachoma.....	4
Septic sore throat.....	3	Tuberculosis.....	46
Tuberculosis.....	39	Typhoid fever.....	14
Typhoid fever.....	22	Whooping cough.....	20
Whooping cough.....	57		
MASSACHUSETTS		MONTANA	
Anthrax.....	1	Chicken pox.....	37
Cerebrospinal meningitis.....	1	Diphtheria.....	2
Chicken pox.....	289	Measles.....	172
Conjunctivitis (suppurative).....	6	Mumps.....	2
Diphtheria.....	87	Poliomyelitis.....	1
German measles.....	13	Scarlet fever.....	113
Influenza.....	9	Smallpox.....	3
Lethargic encephalitis.....	1	Tuberculosis.....	12
Measles.....	51	Typhoid fever.....	1
Mumps.....	170	Whooping cough.....	7
Ophthalmia neonatorum.....	32		
Pneumonia (lobar).....	51	NEBRASKA	
Poliomyelitis.....	3	Chicken pox.....	58
Scarlet fever.....	289	Diphtheria.....	6
Septic sore throat.....	3	German measles.....	1
Trachoma.....	1	Influenza.....	1
Tuberculosis (pulmonary).....	81	Measles.....	3
Tuberculosis (other forms).....	29	Mumps.....	9
Typhoid fever.....	6	Pneumonia.....	1
Whooping cough.....	128	Poliomyelitis.....	1
		Scarlet fever.....	27
MICHIGAN		Smallpox.....	17
Diphtheria.....	125	Typhoid fever.....	43
Measles.....	68	Whooping cough.....	1
Pneumonia.....	69		
Scarlet fever.....	204	NEW JERSEY	
Smallpox.....	9	Cerebrospinal meningitis.....	1
Tuberculosis.....	29	Chicken pox.....	173
Typhoid fever.....	5	Diphtheria.....	140
Whooping cough.....	111	Influenza.....	11
		Measles.....	26

<sup>1</sup> Week ended Friday.



## NEW JERSEY—continued

	Cases
Pneumonia.....	85
Poliomyelitis.....	1
Scarlet fever.....	105
Trachoma.....	2
Typhoid fever.....	16
Whooping cough.....	146

## NEW MEXICO

Chicken pox.....	5
Diphtheria.....	1
German measles.....	2
Measles.....	3
Mumps.....	1
Pneumonia.....	2
Scarlet fever.....	11
Tuberculosis.....	24
Typhoid fever.....	1
Whooping cough.....	5

## NEW YORK

(Exclusive of New York City)

Cerebrospinal meningitis.....	3
Chicken pox.....	453
Diphtheria.....	91
Dysentery.....	1
German measles.....	54
Influenza.....	4
Measles.....	654
Mumps.....	118
Pneumonia.....	178
Poliomyelitis.....	7
Scarlet fever.....	133
Septic sore throat.....	4
Smallpox.....	3
Tetanus.....	1
Typhoid fever.....	32
Vincent's angina.....	18
Whooping cough.....	217

## NORTH CAROLINA

Cerebrospinal meningitis.....	1
Chicken pox.....	59
Diphtheria.....	122
German measles.....	1
Malaria.....	1
Measles.....	9
Scarlet fever.....	84
Septic sore throat.....	2
Smallpox.....	42
Typhoid fever.....	6
Whooping cough.....	243

## OKLAHOMA

(Exclusive of Oklahoma City and Tulsa)

Cerebrospinal meningitis—Creek County.....	1
Chicken pox.....	12
Diphtheria.....	66
Influenza.....	144
Malaria.....	31
Measles.....	27
Pneumonia.....	69
Poliomyelitis:	
Canadian County.....	1
Jefferson County.....	1

## OKLAHOMA—continued

	Cases
Scarlet fever.....	26
Smallpox—McCurtain County <sup>1</sup> .....	55
Typhoid fever.....	37
Whooping cough.....	20

## OREGON

Cerebrospinal meningitis.....	1
Chicken pox.....	44
Diphtheria.....	14
Influenza.....	17
Measles.....	19
Mumps.....	12
Pneumonia <sup>1</sup> .....	5
Scarlet fever.....	59
Smallpox.....	15
Tuberculosis <sup>1</sup> .....	4
Typhoid fever.....	3
Whooping cough.....	8

## PENNSYLVANIA

Anthrax—Philadelphia.....	1
Chicken pox.....	812
Diphtheria.....	224
German measles.....	5
Impetigo contagiosa.....	14
Lethargic encephalitis:	
Philadelphia.....	2
Warren.....	1
Measles.....	504
Mumps.....	80
Ophthalmia neonatorum—Philadelphia.....	4
Pneumonia.....	52
Poliomyelitis:	
Lansdale.....	1
Philadelphia.....	1
Scabies.....	4
Scarlet fever.....	348
Tuberculosis.....	114
Typhoid fever.....	46
Whooping cough.....	285

## RHODE ISLAND

Chicken pox.....	8
Diphtheria.....	11
German measles.....	3
Influenza.....	1
Mumps.....	1
Ophthalmia neonatorum.....	1
Pneumonia.....	1
Scarlet fever.....	21
Tuberculosis.....	6
Whooping cough.....	7

## SOUTH DAKOTA

Chicken pox.....	16
Influenza.....	1
Measles.....	29
Pneumonia.....	3
Scarlet fever.....	36
Smallpox.....	3
Typhoid fever.....	4
Whooping cough.....	9

<sup>1</sup> Occurred in previous weeks.<sup>1</sup> Deaths.

## TENNESSEE

	Cases
Chicken pox.....	17
Diphtheria.....	86
Dysentery.....	2
Influenza.....	51
Lethargic encephalitis—Hamilton County.....	1
Malaria.....	7
Measles.....	16
Ophthalmia neonatorum.....	2
Pellagra.....	5
Pneumonia.....	34
Scarlet fever.....	58
Smallpox.....	6
Tuberculosis.....	12
Typhoid fever.....	25
Whooping cough.....	44

## TEXAS

Chicken pox.....	4
Diphtheria.....	62
Influenza.....	7
Measles.....	1
Pneumonia.....	9
Scarlet fever.....	37
Smallpox.....	1
Tuberculosis.....	7
Typhoid fever.....	2
Whooping cough.....	9

## UTAH

Chicken pox.....	59
Diphtheria.....	9
German measles.....	6
Measles.....	308
Mumps.....	14
Pneumonia.....	5
Scarlet fever.....	19
Smallpox.....	5
Typhoid fever.....	2
Whooping cough.....	2

## VERMONT

Chicken pox.....	7
Diphtheria.....	2
Measles.....	116
Mumps.....	18
Scarlet fever.....	2
Whooping cough.....	26

## VIRGINIA

Poliomyelitis—Wythe County.....	2
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## WASHINGTON

Chicken pox.....	133
Diphtheria.....	35
Favus.....	3
German measles.....	3
Measles.....	70
Mumps.....	28
Poliomyelitis.....	1

## WASHINGTON—continued

	Cases
Scarlet fever.....	82
Smallpox.....	20
Tuberculosis.....	10
Typhoid fever.....	6
Whooping cough.....	13

## WEST VIRGINIA

Chicken pox.....	60
Diphtheria.....	75
Influenza.....	29
Measles.....	35
Poliomyelitis—Clay.....	1
Scarlet fever.....	52
Smallpox.....	1
Tuberculosis.....	14
Typhoid fever.....	28
Whooping cough.....	43

## WISCONSIN

Milwaukee:	
Chicken pox.....	80
Diphtheria.....	21
German measles.....	2
Lethargic encephalitis.....	1
Measles.....	8
Mumps.....	47
Pneumonia.....	15
Poliomyelitis.....	1
Scarlet fever.....	12
Tuberculosis.....	10
Whooping cough.....	53
Scattering:	
Cerebrospinal meningitis.....	2
Chicken pox.....	259
Diphtheria.....	53
German measles.....	4
Influenza.....	11
Measles.....	481
Mumps.....	96
Pneumonia.....	21
Poliomyelitis.....	1
Scarlet fever.....	109
Smallpox.....	5
Tuberculosis.....	17
Typhoid fever.....	4
Whooping cough.....	126

## WYOMING

Cerebrospinal meningitis—Hot Springs County.....	1
Chicken pox.....	41
Diphtheria.....	1
Dysentery (amebic).....	1
Measles.....	8
Pneumonia.....	2
Scarlet fever.....	22
Smallpox.....	5
Whooping cough.....	12

## Reports for Week Ended November 20, 1926

DISTRICT OF COLUMBIA		NORTH DAKOTA—continued	
	Cases		Cases
Chicken pox.....	33	Tuberculosis.....	1
Diphtheria.....	15	Typhoid fever.....	1
Measles.....	5		
Pneumonia.....	17	SOUTH CAROLINA	
Scarlet fever.....	5	Chicken pox.....	51
Tuberculosis.....	24	Dengue.....	4
Typhoid fever.....	2	Diphtheria.....	56
Whooping cough.....	9	Hookworm disease.....	25
		Influenza.....	602
		Malaria.....	280
		Measles.....	9
		Paratyphoid fever.....	3
		Pellagra.....	28
		Poliomyelitis.....	2
		Scarlet fever.....	19
		Smallpox.....	6
		Tuberculosis.....	33
		Typhoid fever.....	34
		Whooping cough.....	41
NORTH DAKOTA			
Cerebrospinal meningitis.....	1		
Chicken pox.....	19		
Diphtheria.....	7		
German measles.....	5		
Measles.....	150		
Pneumonia.....	3		
Scarlet fever.....	52		
Smallpox.....	7		

## SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Cerebrospinal meningitis	Diphtheria	Influenza	Malaria	Measles	Pellagra	Poliomyelitis	Scarlet fever	Smallpox	Typhoid fever
<i>October, 1926</i>										
Illinois.....	8	493	72	10	615	0	24	816	5	386
Kansas.....	3	134	8	1	256	0	10	266	15	77
Louisiana.....	2	158	62	217	1	24	2	53	4	111
Maine.....	1	21	27	0	255	0	3	120	0	29
Maryland.....	2	137	46	5	23	0	5	166	0	204
Minnesota.....	0	346	8	1	320	—	7	949	13	38
Missouri.....	4	308	44	12	72	—	7	435	9	221
North Carolina.....	1	810	—	47	81	—	16	388	55	209
Ohio.....	4	875	20	1	87	—	23	880	44	296
Oklahoma <sup>1</sup> .....	4	179	313	521	22	27	6	118	38	430
South Dakota.....	0	37	0	—	315	—	5	180	4	18
West Virginia.....	0	264	72	—	78	—	0	352	4	344

<sup>1</sup> Exclusive of Tulsa and Oklahoma City.

*October, 1926*

Actinomycosis:		Cases	Conjunctivitis:		Cases
Illinois.....		1	Maine.....		1
Chicken pox:			Dengue:		
Illinois.....		652	Oklahoma <sup>1</sup> .....		3
Kansas.....		197	Dysentery:		
Louisiana.....		1	Illinois.....		53
Maine.....		148	Louisiana.....		10
Maryland.....		114	Maryland.....		20
Minnesota.....		388	North Carolina.....		1
Missouri.....		124	Ohio.....		2
North Carolina.....		63	Oklahoma <sup>1</sup> .....		28
Ohio.....		751	German measles:		
Oklahoma <sup>1</sup> .....		22	Illinois.....		22
South Dakota.....		33	Kansas.....		2
West Virginia.....		124	Maine.....		4

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

German measles—Continued.	Cases	Rabies (in animals):	Cases
Maryland.....	7	Maryland.....	4
North Carolina.....	23	Missouri.....	5
Ohio.....	19	Scabies:	
Hookworm disease:		Oklahoma <sup>1</sup> .....	1
Louisiana.....	91	Septic sore throat:	
Impetigo contagiosa:		Illinois.....	9
Maine.....	14	Kansas.....	2
Maryland.....	2	Maine.....	1
Lead poisoning:		Maryland.....	2
Illinois.....	23	Missouri.....	4
Ohio.....	14	North Carolina.....	11
Leprosy:		Ohio.....	2
Louisiana.....	1	Tetanus:	
Lethargic encephalitis:		Illinois.....	1
Illinois.....	12	Kansas.....	1
Kansas.....	2	Maryland.....	2
Louisiana.....	1	Ohio.....	3
Maryland.....	2	Oklahoma <sup>1</sup> .....	2
Minnesota.....	2	South Dakota.....	1
Ohio.....	1	Trachoma:	
Mumps:		Illinois.....	2
Illinois.....	120	Minnesota.....	1
Kansas.....	25	Missouri.....	15
Louisiana.....	2	Ohio.....	6
Maine.....	23	Oklahoma <sup>1</sup> .....	11
Maryland.....	40	South Dakota.....	8
Missouri.....	16	Trichinosis:	
Ohio.....	70	Illinois.....	1
Oklahoma <sup>1</sup> .....	5	Typhus fever:	
South Dakota.....	1	Maryland.....	1
Ophthalmia neonatorum:		Vincent's angina:	
Illinois.....	46	Main.....	2
Missouri.....	2	Maryland.....	1
North Carolina.....	1	Whooping cough:	
Ohio.....	87	Illinois.....	778
Oklahoma <sup>1</sup> .....	5	Kansas.....	106
Paratyphoid fever:		Louisiana.....	9
Illinois.....	4	Maine.....	171
Kansas.....	1	Maryland.....	220
Ohio.....	4	Minnesota.....	119
Puerperal septicaemia:		Missouri.....	171
Illinois.....	5	North Carolina.....	617
Ohio.....	1	Ohio.....	645
Plague (bubonic)		Oklahoma <sup>1</sup> .....	54
Louisiana (imported).....	2	South Dakota.....	76
		West Virginia.....	314

<sup>1</sup> Exclusive of Oklahoma City and Tulsa.

### RECIPROCAL NOTIFICATIONS

Notifications regarding communicable diseases sent during the month of October, 1926, to other State health departments by departments of health of certain States

Referred by—	Acti- nomy- cosis	Diph- theria	Malaria	Polio- mye- litis	Scarlet fever	Tra- choma	Tuber- culosis	Ty- phoid fever	Small- pox	Vin- cent's angina
California.....							1			
Connecticut.....		1								
Illinois.....							5	9		
Minnesota.....	2		1		1	1	31	7	2	1
New Jersey.....								1		
New York.....		2		1	2			6	1	

**GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES**

*Diphtheria.*—For the week ended November 13, 1926, 40 States reported 2,568 cases of diphtheria. For the week ended November 14, 1925, the same States reported 2,180 cases of this disease. One hundred cities, situated in all parts of the country and having an aggregate population of more than 30,300,000, reported 1,328 cases of diphtheria for the week ended November 13, 1926. Last year for the corresponding week they reported 965 cases. The estimated expectancy for these cities was 1,380 cases. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

*Measles.*—Thirty-nine States reported 3,613 cases of measles for the week ended November 13, 1926, and 2,440 cases of this disease for the week ended November 14, 1925. One hundred cities reported 615 cases of measles for the week this year, and 969 cases last year.

*Poliomyelitis.*—The health officers of 40 States reported 52 cases of poliomyelitis for the week ended November 13, 1926. The same States reported 78 cases for the week ended November 14, 1925.

*Scarlet fever.*—Scarlet fever was reported for the week as follows: Forty States—this year, 3,592 cases; last year, 2,832 cases; 100 cities—this year, 1,208 cases; last year, 1,044 cases; estimated expectancy, 919 cases.

*Smallpox.*—For the week ended November 13, 1926, 40 States reported 377 cases of smallpox. Last year for the corresponding week they reported 293 cases. One hundred cities reported smallpox for the week as follows: 1926, 32 cases; 1925, 46 cases; estimated expectancy, 38 cases. No deaths from smallpox were reported by these cities for the week this year.

*Typhoid fever.*—Six hundred and forty-seven cases of typhoid fever were reported for the week ended November 13, 1926, by 40 States. For the corresponding week of 1925 the same States reported 675 cases of this disease. One hundred cities reported 120 cases of typhoid fever for the week this year and 65 cases for the corresponding week last year. The estimated expectancy for these cities was 104 cases.

*Influenza and pneumonia.*—Deaths from influenza and pneumonia were reported for the week by 95 cities with a population of more than 29,730,000, as follows: 1926, 682 deaths; 1925, 803 deaths.



## City reports for week ended November 13, 1926

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence how many cases of the disease under consideration may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding week of the preceding years. When the reports include several epidemics or when for other reasons the median is unsatisfactory, the epidemic periods are excluded; and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1917 is included. In obtaining the estimated expectancy the figures are smoothed when necessary to avoid abrupt deviations from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases re-ported	Diphtheria		Influenza		Meas-les, cases re-ported	Mumps, cases, re-ported	Pneu-monia, deaths re-ported
			Cases, esti-mated expec-tancy	Cases re-ported	Cases re-ported	Deaths re-ported			
NEW ENGLAND									
Maine:									
Portland.....	75,333	17	3	0	0	0	1	0	0
New Hampshire:									
Concord.....	22,546	0	0	0	0	0	0	0	0
Manchester.....	83,007	0	4	0	0	1	1	0	1
Nashua.....	29,723	0	1	0	0	0	0	0	2
Vermont:									
Barre.....	10,008	4	0	0	0	0	3	0	0
Burlington.....	24,089	2	0	0	0	0	0	0	0
Massachusetts:									
Boston.....	779,620	83	61	30	5	0	7	31	13
Fall River.....	128,993	4	5	2	1	1	0	1	2
Springfield.....	142,065	9	4	5	0	0	2	1	0
Worcester.....	190,757	20	7	9	2	0	0	1	4
Rhode Island:									
Pawtucket.....	60,700	0	1	0	0	0	0	0	1
Providence.....	267,918	0	9	7	0	0	0	0	7
Connecticut:									
Bridgeport.....	(1)	2	10	3	1	0	0	1	2
Hartford.....	160,197	6	10	1	2	0	0	0	5
New Haven.....	178,927	9	4	0	1	0	0	0	4
MIDDLE ATLANTIC									
New York:									
Buffalo.....	538,016	31	26	12	1	0	1	16	
New York.....	5,873,356	119	188	100	45	12	15	87	121
Rochester.....	316,786	7	12	4	1	3	0	4	
Syracuse.....	182,003	2	13	3	0	12	1	2	
New Jersey:									
Camden.....	128,642	6	7	17	0	0	0	4	
Newark.....	452,513	22	16	9	8	0	3	13	11
Trenton.....	132,020	2	6	2	0	1	0	0	5
Pennsylvania:									
Philadelphia.....	1,979,364	73	81	83	1	5	4	2	45
Pittsburgh.....	631,563	62	39	36	1	52	0	18	
Reading.....	112,707	28	5	0	0	0	0	4	
Scranton.....	142,266	0	5	5	0	0	0	8	
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	409,333	14	23	11	0	2	2	7	4
Cleveland.....	936,485	43	52	101	0	1	5	3	9
Columbus.....	279,836	15	6	19	0	0	0	0	6
Toledo.....	287,380	98	17	6	0	0	1	0	4
Indiana:									
Fort Wayne.....	97,846	4	3	11	0	1	0	0	0
Indianapolis.....	358,819	49	11	38	0	1	1	0	13
South Bend.....	80,091	7	3	4	0	0	6	0	1
Terre Haute.....	71,071	7	3	0	0	0	1	0	0
Illinois:									
Chicago.....	2,995,230	122	163	63	7	4	113	20	44
Peoria.....	81,564	8	2	0	0	1	0	10	6
Springfield.....	63,923	10	3	4	1	1	6	0	4

<sup>1</sup> No estimate made.

## City reports for week ended November 13, 1926—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases re-reported	Diphtheria		Influenza		Measles, cases re-reported	Mumps, cases, re-reported	Pneumonia, deaths re-reported
			Cases, estimated expectancy	Cases re-reported	Cases re-reported	Deaths re-reported			
EAST NORTH CENTRAL—continued									
Michigan:									
Detroit.....	1,245,824	101	71	106	4	3	5	19	31
Flint.....	130,316	39	14	6	0	0	0	0	2
Grand Rapids.....	153,698	4	8	0	0	0	1	0	1
Wisconsin:									
Kenosha.....	50,891	7	3	0	0	0	2	2	2
Madison.....	46,385	15	1	0	0	0	1	0	0
Milwaukee.....	509,192	99	32	13	0	1	6	38	8
Racine.....	67,707	13	2	3	0	0	0	6	0
Superior.....	39,671	0	1	9	0	0	0	0	2
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	110,502	4	5	0	0	0	57	0	3
Minneapolis.....	425,435	125	31	39	0	1	6	1	7
St. Paul.....	246,001	34	21	3	0	2	3	0	5
Iowa:									
Davenport.....	52,469	0	2	1	0	-----	1	1	-----
Des Moines.....	141,441	0	7	7	0	-----	0	0	-----
Sioux City.....	76,411	2	-----	-----	-----	-----	-----	-----	-----
Waterloo.....	30,771	67	0	0	0	-----	1	0	-----
Missouri:									
Kansas City.....	367,481	36	15	14	2	2	1	5	11
St. Joseph.....	78,342	0	4	0	0	0	0	0	1
St. Louis.....	821,543	19	57	46	1	1	1	1	-----
North Dakota:									
Fargo.....	26,403	23	0	0	0	0	1	4	1
South Dakota:									
Aberdeen.....	15,036	8	0	0	0	-----	1	0	-----
Sioux Falls.....	30,127	0	0	0	0	-----	0	0	-----
Nebraska:									
Lincoln.....	60,941	8	3	0	0	0	0	0	3
Omaha.....	211,768	6	10	2	0	0	2	4	5
Kansas:									
Topeka.....	55,411	26	3	0	0	0	1	0	2
Wichita.....	88,367	9	8	0	0	0	0	0	1
SOUTH ATLANTIC									
Delaware:									
Wilmington.....	122,049	3	4	3	0	0	1	0	5
Maryland:									
Baltimore.....	796,296	47	35	35	5	3	2	3	22
Cumberland.....	53,741	0	1	1	0	0	0	0	0
Frederick.....	12,035	0	1	1	0	0	0	0	0
District of Columbia:									
Washington.....	497,906	16	26	68	3	2	0	0	9
Virginia:									
Lynchburg.....	30,395	2	2	3	0	1	0	1	4
Norfolk.....	(1)	8	5	8	0	0	1	1	3
Richmond.....	186,403	2	18	22	0	1	4	1	9
Roanoke.....	58,208	0	5	3	0	1	0	1	0
West Virginia:									
Charleston.....	49,019	5	4	1	1	0	0	0	3
Huntington.....	63,485	0	3	13	0	-----	0	0	-----
Wheeling.....	56,208	11	4	2	0	0	2	0	1
North Carolina:									
Raleigh.....	30,371	1	3	5	0	0	0	0	0
Wilmington.....	37,061	2	1	3	0	0	0	0	2
Winston-Salem.....	69,031	1	2	10	0	0	0	0	1
South Carolina:									
Charleston.....	73,125	0	3	2	38	1	0	0	1
Columbia.....	41,225	0	2	1	0	0	0	0	0
Greenville.....	27,311	2	2	1	0	0	0	0	0
Georgia:									
Atlanta.....	(1)	0	10	31	19	0	3	1	9
Brunswick.....	16,509	0	0	1	0	0	0	1	0
Savannah.....	93,134	1	4	2	11	0	0	0	3

1 No estimate made.

## City reports for week ended November 13, 1926—Continued

Division, State, and city	Population July 1, 1925, estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
SOUTH ATLANTIC—CON.									
Florida:									
Miami.....	69,754	0		3	1	0	0	0	2
St. Petersburg.....	26,847		0			0			1
Tampa.....	94,743	2	1	5	0	0	0	0	2
EAST SOUTH CENTRAL									
Kentucky:									
Covington.....	58,309	1	3	5	0	0	2	0	2
Louisville.....	305,935	5	13	7	0	0	0	1	8
Tennessee:									
Memphis.....	174,533	7	15	11	0	0	0	0	6
Nashville.....	136,220	1	5	16	0	2	0	0	7
Alabama:									
Birmingham.....	205,670	2	7	7	4	2	0	2	8
Mobile.....	65,955	0	2	1	0	1	0	0	1
Montgomery.....	46,481	1	2	4	1	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith.....	31,643	0	1	3	0		0	0	
Little Rock.....	74,216	0	4	0	0		1	0	1
Louisiana:									
New Orleans.....	414,493	2	13	16	14	12	2	0	12
Shreveport.....	57,857	0	1	8	0	0	0	0	0
Oklahoma:									
Oklahoma City.....	(1)	0	5	2	0	0	0	0	1
Texas:									
Dallas.....	194,450	0	14	43	3	2	3	1	2
Galveston.....	48,375	0	1	0	0	0	0	0	0
Houston.....	164,954	0	5	17	0	1	0	0	8
San Antonio.....	198,069	0	4	1	0	0	0	0	2
MOUNTAIN									
Montana:									
Billings.....	17,971	7	0	0	0	0	36	0	0
Great Falls.....	29,883	7	1	0	0	0	2	0	3
Helena.....	12,037	0	0	0	0	0	0	0	0
Missoula.....	12,668	10	0	0	0	0	0	0	1
Idaho:									
Boise.....	23,042	4	0	0	0	0	0	0	0
Colorado:									
Denver.....	280,911	5	15	13		1	11	2	4
Pueblo.....	43,787	3	5	0	0	2	0	0	0
New Mexico:									
Albuquerque.....	21,000	1	0	0	0	0	0	0	1
Arizona:									
Phoenix.....	38,969	0	0	0	0	0	0	0	1
Utah:									
Salt Lake City.....	130,948	18	4	7	0	0	119	1	9
Nevada:									
Reno.....	12,665	0	0	0	0	0	0	0	0
PACIFIC									
Washington:									
Seattle.....	(1)	31	6	9	0		1	13	
Spokane.....	108,897	25	4	0	0		35	0	
Tacoma.....	104,455	11	3	7	0	0	0	0	4
Oregon:									
Portland.....	282,383	13	11	8	0	0	8	0	11
California:									
Los Angeles.....	(1)	24	42	57	9	2	4	6	19
Sacramento.....	72,260	3	3	1	0	1	21	11	2
San Francisco.....	557,530	22	17	12	0	1	43	22	3

1 No estimate made.

## City reports for week ended November 13, 1926—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland	1	0	0	0	0	0	0	1	0	7	21
New Hampshire:											
Concord	1	0	0	0	0	0	0	0	0	0	15
Manchester	1	0	0	0	0	2	0	0	0	0	21
Nashua	1	1	0	0	0	0	0	0	0	0	
Vermont:											
Barre	0	0	0	0	0	0	0	0	0	2	0
Burlington	1	0	0	0	0	1	0	0	0	3	3
Massachusetts:											
Boston	37	79	0	0	0	12	2	3	1	23	203
Fall River	2	1	0	0	0	3	1	0	0	13	
Springfield	6	2	0	0	0	1	0	0	0	2	28
Worcester	9	28	0	0	0	0	0	0	0	0	43
Rhode Island:											
Pawtucket	1	2	0	0	0	1	0	0	0	0	13
Providence	5	12	0	0	0	3	1	0	0	2	60
Connecticut:											
Bridgeport	7	13	0	0	0	2	0	0	0	3	22
Hartford	6	10	0	0	0	0	0	0	0	6	
New Haven	6	2	0	0	0	1	1	0	0	1	43
MIDDLE ATLANTIC											
New York:											
Buffalo	17	11	0	0	0	10	2	5	0	17	136
New York	95	134	0	0	0	<sup>2</sup> 107	20	24	4	128	1,360
Rochester	7	9	0	0	0	2	1	1	0	3	62
Syracuse	11	5	0	0	0	1	1	0	0	3	41
New Jersey:											
Camden	3	10	0	0	0	1	0	1	0	0	21
Newark	13	14	0	0	0	5	2	0	0	22	109
Trenton	2	1	0	0	0	2	1	3	1	5	47
Pennsylvania:											
Philadelphia	61	50	0	0	0	40	6	9	1	37	470
Pittsburgh	38	16	0	0	0	7	1	0	2	10	151
Reading	2	1	0	0	0	0	0	0	0	8	31
Scranton	2	11	0	0	0	6	0	0	0	5	51
EAST NORTH CENTRAL											
Ohio:											
Cincinnati	13	6	0	0	0	10	1	1	0	3	120
Cleveland	25	16	0	0	0	15	3	2	0	25	189
Columbus	9	9	0	4	0	6	1	0	0	2	90
Toledo	11	7	0	0	0	9	1	3	0	22	66
Indiana:											
Fort Wayne	1	1	0	0	0	0	1	0	0	1	28
Indianapolis	10	24	2	8	0	5	1	0	0	14	99
South Bend	3	0	0	0	0	0	0	0	0	0	
Terre Haute	4	7	1	0	0	0	0	0	0	5	8
Illinois:											
Chicago	104	87	1	0	0	25	6	3	0	54	595
Peoria	7	3	0	0	0	2	0	0	0	0	28
Springfield	2	0	0	0	0	0	0	1	0	0	29
Michigan:											
Detroit	65	76	2	2	0	17	3	4	1	37	264
Flint	9	13	1	0	0	2	1	0	0	2	30
Grand Rapids	8	11	1	0	0	0	1	1	0	0	28
Wisconsin:											
Kenosha	1	1	1	0	0	0	0	0	0	13	5
Madison	1	6	0	0	0	1	0	0	0	11	4
Milwaukee	34	13	2	0	0	4	0	2	0	60	109
Racine	5	2	1	0	0	6	1	0	0	10	7
Superior	2	1	0	0	0	0	0	0	0	0	8

<sup>1</sup> In the Public Health Reports of Oct. 29, 1926, p. 2503, was published a report of 10 deaths from typhoid fever at Boston, Mass., during the week ended Oct. 9, 1926. The health commissioner of Boston advises that no deaths from typhoid fever occurred during that week.

<sup>2</sup> Pulmonary tuberculosis only.

## City reports for week ended November 13, 1926—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	5	12	0	0	0	0	0	0	0	0	18
Minneapolis.....	39	66	1	0	0	5	1	1	0	0	85
St. Paul.....	15	23	6	1	0	3	1	1	0	10	52
Iowa:											
Davenport.....	1	2	0	0	0	0	0	0	0	0	0
Des Moines.....	11	3	1	0	0	0	0	0	0	1	0
Sioux City.....	3	0	0	0	0	0	0	0	0	0	0
Waterloo.....	3	0	0	0	0	0	0	0	0	1	0
Missouri:											
Kansas City.....	12	4	0	1	0	3	1	1	0	3	103
St. Joseph.....	3	0	0	0	0	2	0	0	0	0	18
St. Louis.....	35	40	0	0	0	7	3	3	2	14	187
North Dakota:											
Fargo.....	2	5	0	0	0	0	0	1	0	1	7
South Dakota:											
Aberdeen.....	0	11	0	0	0	0	0	0	0	1	0
Sioux Falls.....	2	3	0	0	0	0	0	0	0	0	0
Nebraska:											
Lincoln.....	1	4	0	0	0	0	0	1	0	4	13
Omaha.....	4	10	3	0	0	2	1	0	0	2	47
Kansas:											
Topeka.....	3	2	0	3	0	0	0	0	0	2	13
Wichita.....	3	8	0	0	0	0	1	1	0	2	33
SOUTH ATLANTIC											
Delaware:											
Wilmington.....	3	10	0	0	0	4	1	0	0	7	30
Maryland:											
Baltimore.....	15	20	0	0	0	14	4	4	0	44	241
Cumberland.....	0	0	0	0	0	0	1	0	1	1	10
Frederick.....	0	0	0	0	0	0	0	1	0	8	3
District of Colum- bia:											
Washington.....	17	20	0	0	0	11	3	3	1	3	140
Virginia:											
Lynchburg.....	1	3	0	0	0	0	0	1	0	2	17
Norfolk.....	2	8	0	0	0	1	0	1	1	2	0
Richmond.....	9	4	0	0	0	5	1	0	0	2	58
Roanoke.....	3	8	0	0	0	1	0	3	0	2	20
West Virginia:											
Charleston.....	2	1	0	0	0	1	0	0	1	0	31
Huntington.....	1	6	0	0	0	0	0	0	0	0	0
Wheeling.....	3	0	0	0	0	1	1	0	0	0	18
North Carolina:											
Raleigh.....	2	3	0	0	0	0	0	0	0	7	11
Wilmington.....	1	1	0	1	0	1	0	0	0	3	16
Winston-Salem.....	2	5	0	0	0	2	0	0	0	2	25
South Carolina:											
Charleston.....	1	0	0	0	0	1	1	2	0	0	19
Columbia.....	1	1	0	0	0	0	0	1	0	0	0
Greenville.....	1	2	0	0	0	0	0	1	0	0	4
Georgia:											
Atlanta.....	6	7	1	0	0	8	1	4	0	0	83
Brunswick.....	0	0	0	0	0	0	0	0	0	0	2
Savannah.....	0	1	0	0	0	4	0	0	0	0	28
Florida:											
Miami.....		1		0	0	1		1	0	0	25
St. Petersburg.....	0		0		0	0	1		0		12
Tampa.....	1	1	0	0	0	2	0	1	1	0	13
EAST SOUTH CENTRAL											
Kentucky:											
Covington.....	2	1	0	0	0	1	0	0	0	0	19
Louisville.....	4	21	0	1	0	6	2	0	0	2	77
Tennessee:											
Memphis.....	4	15	0	1	0	2	2	7	0	3	59
Nashville.....	4	15	0	0	0	0	2	3	1	3	37
Alabama:											
Birmingham.....	5	4	1	0	0	5	2	0	0	3	61
Mobile.....	1	0	0	0	0	2	1	0	1	0	23
Montgomery.....	0	1	0	0	0	0	1	0	0	0	6



## City reports for week ended November 13, 1926—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL											
Arkansas:											
Fort Smith.....	1	0	0	0			1	1		0	
Little Rock.....	2	1	0	0	0	3	1	1	0	5	
Louisiana:											
New Orleans.....	5	10	0	0	0	13	3	1	0	0	166
Shreveport.....	1	3	0	1	0	1	1	0	0	0	20
Oklahoma:											
Oklahoma City.....	3	2	0	1	0	1	1	1	0	0	15
Texas:											
Dallas.....	4	10	0	6	0	2	1	2	0	0	47
Galveston.....	0	1	0	0	0	1	0	0	0	0	12
Houston.....	2	8	0	0	0	9	0	0	0	0	71
San Antonio.....	1	0	1	0	0	4	0	3	1	0	48
MOUNTAIN											
Montana:											
Billings.....	1	0	0	0	0	1	0	0	0	0	6
Great Falls.....	2	2	1	0	0	0	0	0	0	0	8
Helena.....	0	0	0	0	0	1	0	0	0	0	3
Missoula.....	1	15	0	0	0	0	0	0	0	0	8
Idaho:											
Boise.....	0	0	0	0	0	0	0	0	0	0	5
Colorado:											
Denver.....	9	55	3	1	0	7	1	1	0	0	62
Pueblo.....	1	0	0	0	0	0	1	1	0	0	11
New Mexico:											
Albuquerque.....	1	1	0	0	0	4	0	0	0	0	9
Arizona:											
Phoenix.....	2	0	0	0	0	11	0	1	0	0	26
Utah:											
Salt Lake City.....	3	3	1	0	0	1	1	1	0	3	39
Nevada:											
Reno.....	1	2	0	0	0	0	0	0	0	0	3
PACIFIC											
Washington:											
Seattle.....	8	8	3	0			1	5		1	
Spokane.....	7	11	2	1			1	0		3	
Tacoma.....	2	2	1	1	0	0	0	0	0	0	30
Oregon:											
Portland.....	7	22	3	0	0	1	1	1	0	0	76
California:											
Los Angeles.....	18	60	2	0	0	22	2	3	0	2	250
Sacramento.....	2	3	1	0	0	2	0	0	0	1	27
San Francisco.....	9	20	0	0	0	18	1	3	2	8	136

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infan- tile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, esti- mated expect- ancy	Cases	Deaths
<b>NEW ENGLAND</b>									
Massachusetts:									
Boston.....	0	0	0	0	0	0	1	2	0
Rhode Island:									
Providence.....	0	1	0	0	0	0	1	0	0
<b>MIDDLE ATLANTIC</b>									
New York:									
Buffalo.....	1	1	0	0	0	0	0	0	0
New York.....	2	0	4	4	0	0	6	1	1
New Jersey:									
Newark <sup>1</sup> .....	0	0	0	0	0	0	0	1	0
Pennsylvania:									
Philadelphia.....	0	0	0	0	0	0	0	1	0

<sup>1</sup> Rabies (human); 1 case at Newark, N. J.

## City reports for week ended November 13, 1926—Continued

Division, State, and city	Cerebrospinal meningitis		Lethargic encephalitis		Pellagra		Pollomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
<b>EAST NORTH CENTRAL</b>									
Ohio:									
Cleveland.....	1	0	0	0	0	0	0	1	0
Toledo.....	0	0	0	0	0	0	0	2	0
Michigan:									
Detroit.....	0	0	1	0	0	0	1	0	0
Grand Rapids.....	0	0	0	0	0	0	0	2	0
<b>WEST NORTH CENTRAL</b>									
Nebraska:									
Omaha.....	0	0	0	0	0	0	0	1	1
<b>SOUTH ATLANTIC</b>									
Maryland:									
Baltimore.....	1	0	2	1	0	0	1	0	0
Virginia:									
Lynchburg.....	0	0	0	0	0	0	0	1	0
North Carolina:									
Winston-Salem.....	1	1	0	0	0	0	0	0	0
South Carolina:									
Charleston <sup>1</sup> .....	0	0	0	0	1	0	0	0	0
Georgia:									
Atlanta.....	0	0	0	0	0	0	0	3	0
Florida:									
St. Petersburg.....	0	1	0	0	0	0	0	0	0
<b>EAST SOUTH CENTRAL</b>									
Kentucky:									
Louisville.....	1	0	0	0	0	0	0	0	0
Tennessee:									
Memphis.....	0	1	0	0	0	0	0	0	0
Alabama:									
Birmingham.....	0	0	0	0	1	0	0	0	0
<b>WEST SOUTH CENTRAL</b>									
Arkansas:									
Little Rock.....	0	0	0	0	0	2	0	0	0
Louisiana:									
New Orleans.....	1	0	0	0	0	0	0	0	0
Texas:									
Houston.....	0	0	0	0	1	1	0	0	0
San Antonio.....	1	0	0	0	0	1	0	0	0

<sup>1</sup> Dengue; 1 case at Charleston, S. C.

The following table gives the rates per 100,000 population for 101 cities for the five-week period ended November 13, 1926, compared with those for a like period ended November 14, 1925. The population figures used in computing the rates are approximate estimates as of July 1, 1925 and 1926, respectively, authoritative figures for many of the cities not being available. The 101 cities reporting cases had an estimated aggregate population of nearly 30,000,000 in 1925 and nearly 30,500,000 in 1926. The 95 cities reporting deaths had more than 29,200,000 estimated population in 1925 and more than 29,730,000 in 1926. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

Summary of weekly reports from cities, October 10 to November 13, 1926—Annual rates per 100,000 population, compared with rates for the corresponding period of 1925<sup>1</sup>

## DIPHTHERIA CASE RATES

	Week ended—									
	Oct. 17, 1925	Oct. 16, 1926	Oct. 24, 1925	Oct. 23, 1926	Oct. 31, 1925	Oct. 30, 1926	Nov. 7, 1925	Nov. 6, 1926	Nov. 14, 1925	Nov. 13, 1926
101 cities.....	150	165	<sup>2</sup> 163	203	<sup>3</sup> 176	213	161	<sup>4</sup> 224	169	<sup>5</sup> 228
New England.....	120	85	<sup>6</sup> 94	85	132	106	93	118	122	135
Middle Atlantic.....	129	100	128	122	148	138	125	142	140	162
East North Central.....	166	219	180	261	180	241	178	276	185	264
West North Central.....	233	209	256	240	278	264	264	252	235	<sup>7</sup> 216
South Atlantic.....	269	218	<sup>8</sup> 252	302	213	357	198	319	236	391
East South Central.....	89	270	100	400	89	384	126	425	63	265
West South Central.....	88	219	<sup>9</sup> 101	280	251	331	189	254	208	379
Mountain.....	157	164	361	255	<sup>10</sup> 170	155	277	<sup>11</sup> 223	240	182
Pacific.....	105	175	135	191	149	205	141	288	138	232

## MEASLES CASE RATES

	67	43	<sup>1</sup> 91	49	<sup>2</sup> 102	64	149	<sup>3</sup> 81	169	<sup>4</sup> 106
101 cities.....	431	26	<sup>5</sup> 578	26	582	24	822	66	968	31
New England.....	65	9	87	12	110	13	159	16	170	44
Middle Atlantic.....	24	36	45	47	54	77	70	80	84	169
East North Central.....	10	44	10	42	12	85	14	151	10	<sup>6</sup> 152
West North Central.....	52	21	<sup>7</sup> 37	26	56	9	144	21	217	24
South Atlantic.....	5	0	37	21	16	21	16	26	16	10
East South Central.....	0	13	13	4	4	0	9	9	9	26
West South Central.....	18	237	28	337	<sup>8</sup> 19	391	37	<sup>9</sup> 809	46	1,529
Mountain.....	28	291	11	278	14	342	17	315	19	280
Pacific.....										

## SCARLET FEVER CASE RATES

	121	130	<sup>1</sup> 127	152	<sup>2</sup> 155	169	163	<sup>3</sup> 180	182	<sup>4</sup> 208
101 cities.....	127	144	<sup>5</sup> 125	194	194	240	261	265	237	352
New England.....	75	62	96	51	106	92	110	94	142	125
Middle Atlantic.....	143	132	135	155	185	157	159	189	180	185
East North Central.....	256	318	284	373	292	354	358	415	354	<sup>6</sup> 354
West North Central.....	129	126	<sup>7</sup> 126	163	180	133	173	199	161	178
South Atlantic.....	142	145	121	223	74	332	100	249	166	290
East South Central.....	53	86	40	95	40	112	97	112	114	142
West South Central.....	46	264	111	446	<sup>8</sup> 189	364	166	<sup>9</sup> 595	176	791
Mountain.....	135	205	127	235	141	237	155	205	199	280
Pacific.....										

## SMALLPOX CASE RATES

	8	4	<sup>1</sup> 7	3	<sup>2</sup> 10	3	9	<sup>3</sup> 3	8	<sup>4</sup> 5
101 cities.....	0	0	<sup>5</sup> 7	0	0	0	0	0	0	0
New England.....	0	0	0	0	0	0	0	0	0	0
Middle Atlantic.....	8	3	4	3	16	1	12	6	13	10
East North Central.....	0	6	4	0	25	2	10	2	4	<sup>6</sup> 10
West North Central.....	6	4	<sup>7</sup> 0	9	6	6	12	0	6	2
South Atlantic.....	42	0	5	10	5	5	26	10	32	10
East South Central.....	0	4	0	0	0	4	0	9	0	30
West South Central.....	28	9	9	0	<sup>8</sup> 9	9	18	<sup>9</sup> 0	18	9
Mountain.....	35	32	75	16	44	22	47	3	41	5
Pacific.....										

<sup>1</sup> The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1925 and 1926, respectively.

<sup>2</sup> Barre, Vt., and Winston-Salem, N. C., not included.

<sup>3</sup> Helena, Mont., not included.

<sup>4</sup> Sioux City, Iowa, not included.

<sup>5</sup> Barre, Vt., not included.

<sup>6</sup> Winston-Salem, N. C., not included.

Summary of weekly reports from cities, October 10 to November 13, 1926—Annual rates per 100,000 population, compared with rates for the corresponding period of 1925—Continued

### TYPHOID FEVER CASE RATES

	Week ended—									
	Oct. 17, 1925	Oct. 16, 1926	Oct. 24, 1925	Oct. 23, 1926	Oct. 31, 1925	Oct. 30, 1926	Nov. 7, 1925	Nov. 6, 1926	Nov. 14, 1925	Nov. 13, 1926
101 cities.....	35	32	32	26	25	27	27	24	11	21
New England.....	24	57	14	19	17	12	22	17	2	9
Middle Atlantic.....	28	26	25	20	21	14	12	12	8	21
East North Central.....	31	15	9	13	15	17	18	13	9	10
West North Central.....	20	14	33	22	18	24	31	26	16	17
South Atlantic.....	65	66	73	77	25	75	60	45	10	36
East South Central.....	121	140	147	99	100	140	168	104	42	52
West South Central.....	44	26	79	22	79	39	48	22	57	34
Mountain.....	46	46	65	27	85	46	37	53	9	27
Pacific.....	19	16	30	13	19	19	8	46	3	30

### INFLUENZA DEATH RATES

95 cities.....	6	6	8	7	10	11	13	11	11	14
New England.....	0	5	2	7	12	7	5	12	7	2
Middle Atlantic.....	5	4	8	8	10	8	14	9	14	10
East North Central.....	8	2	9	5	7	14	11	6	10	10
West North Central.....	6	11	6	2	11	2	6	6	13	13
South Atlantic.....	2	8	2	8	6	21	17	15	2	17
East South Central.....	16	16	5	10	28	10	37	21	26	26
West South Central.....	10	14	19	14	34	24	15	43	29	71
Mountain.....	0	27	37	27	9	9	9	19	0	27
Pacific.....	11	11	4	0	4	7	15	7	4	14

### PNEUMONIA DEATH RATES

95 cities.....	90	77	88	85	117	96	133	101	132	106
New England.....	93	76	87	83	108	99	134	99	120	90
Middle Atlantic.....	94	88	89	104	136	101	143	113	143	114
East North Central.....	89	63	79	60	114	86	119	84	131	85
West North Central.....	58	53	60	49	97	63	86	84	81	76
South Atlantic.....	121	88	116	113	129	107	194	120	152	139
East South Central.....	95	52	121	99	105	135	152	99	163	166
West South Central.....	53	104	111	57	116	80	150	118	102	113
Mountain.....	120	118	111	127	76	182	102	167	176	155
Pacific.....	80	82	76	90	47	89	91	50	109	99

<sup>1</sup> Barre, Vt., and Winston-Salem, N. C., not included.

<sup>2</sup> Barre, Vt., not included.

<sup>3</sup> Helena, Mont., not included.

<sup>4</sup> Winston-Salem, N. C., not included.

<sup>5</sup> Sioux City, Iowa, not included.

Number of cities included in summary of weekly reports, and aggregate population of cities in each group, approximated as of July 1, 1925 and 1926, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1925	1926	1925	1926
Total.....	101	95	29,900,058	30,427,598	29,221,531	29,733,613
New England.....	12	12	2,176,124	2,206,124	2,176,124	2,206,124
Middle Atlantic.....	10	10	10,346,970	10,476,970	10,346,970	10,476,970
East North Central.....	16	16	7,481,656	7,655,436	7,481,656	7,655,436
West North Central.....	12	10	2,550,024	2,589,131	2,431,253	2,468,448
South Atlantic.....	21	21	2,716,070	2,776,070	2,716,070	2,776,070
East South Central.....	7	7	993,103	1,004,953	993,103	1,004,953
West South Central.....	8	6	1,184,057	1,212,057	1,078,198	1,103,695
Mountain.....	9	9	563,912	572,773	563,912	572,773
Pacific.....	6	4	1,888,142	1,934,084	1,434,245	1,469,144

# FOREIGN AND INSULAR

## THE FAR EAST

*Report for week ended November 6, 1926.*—The following report for the week ended November 6, 1926, was transmitted by the eastern bureau of the secretariat of the health section of the League of Nations, located at Singapore, to the headquarters at Geneva:

Maritime towns	Plague		Cholera		Small-pox		Maritime towns	Plague		Cholera		Small-pox	
	Cases	Deaths	Cases	Deaths	Cases	Deaths		Cases	Deaths	Cases	Deaths	Cases	Deaths
Madagascar: Tamatave.....	1	---	0	0	0	0	Dutch East Indies:						
Mauritius: Port Louis.....	2	1	0	0	0	0	Cherbon.....	0	0	0	0	0	0
Union of South Africa:							Surabaya.....	4	4	0	0	0	0
Durban.....	0	0	0	0	7	---	Siam: Bangkok.....	0	0	1	0	3	1
British India:							French Indo-China:						
Calcutta.....	---	0	---	16	2	2	Salgon and Cholon..	0	0	1	1	0	0
Bombay.....	---	0	---	0	5	3	Turane.....	0	0	5	4	0	0
Rangoon.....	---	4	---	1	0	0	China:						
Ceylon: Colombo.....	1	1	1	0	0	0	Amoy.....	0	0	1	---	0	0
Straits Settlements:							Shanghai.....	0	0	1	0	0	0
Singapore.....	0	0	0	0	1	0	U. S. S. R.: Vladivostok..	0	0	0	0	2	---

Telegraphic reports from the following maritime towns indicated that no case of plague, cholera, or smallpox was reported during the week:

### ASIA

*Arabia.*—Aden, Jeddah, Kamaran, Perim.  
*Iraq.*—Basrah.  
*Persia.*—Mohammerah, Bender Abbas, Bushire.  
*British India.*—Madras, Karachi, Chittagong, Cochin, Vizagapatam, Negapatam, Tuticorin.  
*Federated Malay States.*—Port Swettenham.  
*Straits Settlements.*—Penang.  
*Dutch East Indies.*—Samarang, Batavia, Sabang, Makassar, Banjarmasin, Palembang, Menado, Pontianak, Belawan-Deli, Padang, Samarinda, Tarakan.  
*Sarawak.*—Kuching.  
*British North Borneo.*—Sandakan, Jesselton, Kudat, Tawao.  
*Portuguese Timor.*—Dilly.  
*French Indo-China.*—Haiphong.  
*China.*—Hongkong.  
*Formosa.*—Keelung.  
*Japan.*—Yokohama, Osaka, Nagasaki, Kobe, Niigata, Tsuruga, Hakodate, Shimonoseki, Moji.  
*Korea.*—Chemulpo, Fusan.  
*Manchuria.*—Mukden, Changchun, Harbin, Antung.  
*Kwantung.*—Port Arthur, Dairen.

### AUSTRALASIA AND OCEANIA

*Australia.*—Adelaide, Melbourne, Sydney, Brisbane, Rockhampton, Townsville, Port Darwin, Broome, Fremantle, Carnarvon, Thursday Island.  
*New Guinea.*—Port Moresby.  
*New Britain Mandated Territory.*—Rabaul.  
*New Zealand.*—Auckland, Wellington, Christchurch, Invercargill, Dunedin.  
*New Caledonia.*—Noumea.  
*Fiji.*—Suva.  
*Hawaii.*—Honolulu.  
*Society Islands.*—Papeete.

### AFRICA

*Egypt.*—Port Said, Suez, Alexandria.  
*Anglo-Egyptian Sudan.*—Port Sudan, Suakin.  
*Eritrea.*—Massaua.  
*French Somaliland.*—Jibuti.  
*British Somaliland.*—Berbera.  
*Italian Somaliland.*—Mogadiscio.  
*Kenya.*—Mombasa.  
*Zanzibar.*—Zanzibar.  
*Tanganyika.*—Dar-es-Salaam.  
*Seychelles.*—Victoria.  
*Madagascar.*—Majunga.  
*Portuguese East Africa.*—Mozambique, Beira, Lourenco Marques.  
*Union of South Africa.*—East London, Port Elizabeth, Cape Town.  
 Reports had not been received in time for distribution from—  
*Dutch East Indies.*—Ballikpapan.  
*Philippine Islands.*—Manila, Iloilo, Jolo, Cebu, Zamboanga.



## CANADA

*Communicable diseases—Week ended November 6, 1926.*—The Canadian Ministry of Health reports cases of certain communicable diseases in seven Provinces of Canada for the week ended November 6, 1926, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	Total
Influenza.....	5							5
Lethargic encephalitis.....				2	2			4
Poliomyelitis.....				2				2
Smallpox.....		1		10	5	10	11	37
Typhoid fever.....	6	3	9	17	1	10	1	47

## ECUADOR

*Plague—Guayaquil—October 1-15, 1926.*—During the 15-day period ended October 15, 1926, one case of plague was reported at Guayaquil, Ecuador.

*Plague-infected rats.*—During the same period of 7,730 rats taken, 6 rats were found plague-infected.

## GREECE

*Plague—Patras—October 27-29, 1926.*—Plague has been reported at Patras, Greece, as follows: October 27, 1926, one case; October 29, one death.

## LATVIA

*Communicable diseases—August, 1926.*—During the month of August, 1926, communicable diseases were reported in the Republic of Latvia as follows:

Disease	Cases	Disease	Cases
Anthrax.....	2	Paratyphoid fever.....	3
Cerebrospinal meningitis.....	3	Puerperal fever.....	3
Diphtheria.....	35	Rabies.....	1
Dysentery.....	76	Scarlet fever.....	147
Erysipelas.....	24	Tetanus.....	2
Lethargic encephalitis.....	2	Trachoma.....	21
Malaria.....	1	Typhoid fever.....	135
Measles.....	10	Typhus fever.....	2
Mumps.....	3	Whooping cough.....	51

## MADAGASCAR

*Plague—September 1-15, 1926.*—During the period September 1 to 15, 1926, 87 cases of plague with 78 deaths were reported in the Island of Madagascar. The occurrence was distributed by provinces as follows: *Itasy*—Cases, 6; deaths, 6. *Majunga*—Cases, 42; deaths, 33. *Moramanga*—Cases, 8; deaths, 8. *Tamatave*—Cases, 2; deaths, 2. *Tananarive*—Cases, 29; deaths, 29. The distribution according

to type was: Bubonic, 58; pneumonic, 17; septicemic, 12 cases. The urban occurrence reported was, in Tananarive town (interior), 4 cases; 4 deaths. Pneumonic, 3; septicemic, 1.

### MEXICO

*Smallpox erroneously reported at Tampico—June 1-10, 1926.*—Later information shows that the report of two deaths from smallpox at Tampico, Mexico, for the period June 1-10, 1926, published in the Public Health Reports, July 2, 1926, page 1402, and in subsequent issues, was erroneous.

### VIRGIN ISLANDS

*Communicable diseases—October, 1926.*—Communicable diseases were reported in the Virgin Islands of the United States during the month of October, 1926, as follows:

Island and disease	Cases	Remarks
St. Thomas and St. John:		
Chancroid	2	1 imported.
Gonorrhea	9	1 imported.
Malaria	1	Imported. Malignant subtertian.
Schistosomiasis	1	Imported. Manson.
Syphilis	10	Primary, 1; secondary, 7.
Trachoma	1	
Tuberculosis	1	Chronic pulmonary.
Typhoid fever	1	Imported.
Uncinariasis	3	Necator americanus. 1 imported.
St. Croix:		
Dysentery	1	Entameble.
Filariasis	10	Bancrofti.
Gonorrhea	1	
Pellagra	5	
Tuberculosis	2	Chronic pulmonary.

### CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER

The reports contained in the following tables must not be considered as complete or final as regards either the lists of countries included or the figures for the particular countries for which reports are given.

#### Reports Received During Week Ended December 3, 1926<sup>1</sup>

##### CHOLERA

Place	Date	Cases	Deaths	Remarks
China:				
Amoy	Oct. 10-23	18		
Changsha	Oct. 10-16	1		
Shanghai	Oct. 3-9	2	10	Cases, foreign; deaths, foreign and native, in international concessions.
Swatow	Oct. 10-16	7		
India:				
Bombay	Oct. 10-16	1	1	Sept. 26-Oct. 2, 1926: Cases, 864; deaths, 477. Corresponding period, year 1925: Cases, 1,318; deaths, 730.
Philippine Islands:				
Manila				Dec. 27, 1925-Oct. 2, 1926: Cases, 26; deaths, 6.
Siam				Oct. 3-9, 1926: Cases, 26; deaths, 17. Apr. 1-Oct. 9, 1926: Cases, 7,600; deaths, 5,040.
Bangkok	Oct. 3-9	2		District.

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## **Reports Received During Week Ended December 3, 1926—Continued**

### **PLAGUE**

Place	Date	Cases	Deaths	Remarks
Ecuador:				
Guayaquil	Oct. 1-15	1		Rats taken, 7,730; rats, found plague infected, 6.
Do	Oct. 16-31	2		Rats taken, 12,500; found infected, 20.
Greece:				
Patras	Oct. 27-29	1	1	
India:				
Madras Presidency	Sept. 26-Oct. 2	111	50	Sept. 26-Oct. 2, 1926: Cases, 1,752; deaths, 1,008. Corresponding period, year 1925: Cases, 983; deaths, 602.
Java:				
Batavia	Oct. 10-16	9	9	Province.
East Java and Madura	do		1	
Madagascar:				
Province—				Sept. 1-15, 1926: Cases, 87; deaths, 78.
Itasy	Sept. 1-15	6	6	Bubonic, cases, 5; pneumonic, 1.
Majunga	do	42	33	Bubonic.
Moramanga	do	8	8	Bubonic, 1; septicemic, 7.
Tamatave	do	2	2	Bubonic.
Tananarive	do	29	29	Bubonic, 8; pneumonic, 16; septicemic, 5.
Tananarive Town	do	4	4	Pneumonic, 3; septicemic, 1.

### **SMALLPOX**

Canada:				
Alberta:				
Calgary	Oct. 31-Nov. 13	12		Oct. 31-Nov. 6, 1926: Cases, 11. Oct. 17-23, 1926: Cases, 6. Out of date.
Manitoba				Oct. 31-Nov. 6, 1926: Cases, 5.
New Brunswick				Oct. 31-Nov. 6, 1926: 1 case.
Ontario:				Oct. 31-Nov. 6, 1926: Cases, 10.
Toronto	Oct. 31-Nov. 13	19		
Saskatchewan				Oct. 31-Nov. 6, 1926: Cases, 10.
China:				
Chungking	Oct. 3-9			Present.
Shanghai	do	1		Foreign.
Swatow	Oct. 16-23			Sporadic.
France:				
Paris	Oct. 11-20	11	3	
Great Britain:				
England and Wales				Oct. 17-26, 1926: Cases, 120.
London	Oct. 17-23	1		
India:				
Bombay	Oct. 10-16	4	3	Sept. 26-Oct. 2, 1926: Cases, 345; deaths, 134. Corresponding week, 1925—Cases, 1,153; deaths, 247.
Madras	Oct. 17-23	2	1	
Java:				
Batavia	Oct. 10-16	1		Province.
East Java and Madura	Sept. 26-Oct. 2	18	2	
Mexico:				
San Luis Potosi	Nov. 7-13		2	
Portugal:				
Lisbon	Oct. 23-Nov. 6	9	1	

### **TYPHUS FEVER**

China:				
Antung	Oct. 11-24	5		
Latvia	Aug. 1-31	2		
Palestine:				
Jaffa	Oct. 19-25	1		Oct. 19-25, 1926: Cases, 2. August, 1926: Cases, 10.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from June 26 to November 26, 1926<sup>1</sup>**

## **CHOLERA**

Place	Date	Cases	Deaths	Remarks
Ceylon.....	.....	.....	.....	Apr. 18–May 20, 1926: Cases, 31; deaths, 29.
China:				
Amoy.....	Aug. 8–Oct. 9.....	253	.....	Stated to be present in epidemic form.
Antung.....	Aug. 1–31.....	500	.....	
Canton.....	June 1–30.....	38	14	
Do.....	July 15–31.....	54	28	
Changsha.....	Oct. 3–9.....	1	.....	
Foochow.....	Aug. 15–Oct. 2.....	.....	1	In foreign population.
Kulansu.....	Sept. 12–18.....	.....	2	
Manchuria—				
Changshun.....	Aug. 1–31.....	320	.....	
Dairen.....	do.....	10	1	
Harbin.....	Aug. 5–Sept. 12.....	289	83	
Newchwang.....	Aug. 1–31.....	167	.....	
Nanking.....	July 25–Oct. 2.....	.....	.....	Present.
Shanghai.....	Reported July 20.....	35	8	
Do.....	July 25–Oct. 2.....	38	409	Cases, foreign; deaths, native and foreign.
Swatow.....	July 11–Oct. 9.....	43	63	
Tsingtao.....	July 11–Aug. 30.....	4	4	Japanese settlements, 10 deaths; Chinese, 30 to 40 deaths daily; estimated.
Chosen:				
North Heian Province.....	Sept. 3–16.....	70	30	Deaths estimated.
Shingishu.....	Sept. 13.....	19	.....	Including places in vicinity.
French Settlements in India.....	Mar. 7–June 25.....	31	30	
Do.....	June 27–Aug. 28.....	94	83	
India:				
Bombay.....	May 30–June 5.....	1	1	Apr. 25–June 26, 1926: Cases, 18,526; deaths, 11,531. June 27–Sept. 25, 1926: Cases, 26,403; deaths, 16,809.
Do.....	July 18–Aug. 28.....	3	3	
Calcutta.....	Apr. 4–May 29.....	478	418	
Do.....	June 13–26.....	73	69	
Do.....	June 27–Sept. 25.....	304	272	
Madras.....	May 16–June 5.....	2	1	
Do.....	Aug. 1–Sept. 25.....	7	6	
Rangoon.....	May 9–June 26.....	67	44	
Do.....	June 27–Sept. 4.....	31	29	
Indo-China:				
Saigon.....	May 2–15.....	52	48	
Do.....	May 22–June 26.....	42	32	
Do.....	June 27–Aug. 14.....	31	17	
Japan.....				To Sept. 10, 1926: Cases, 35.
Ken (Prefecture)—				
Hiroshima.....	To Sept. 10.....	1	.....	
Hyogo.....	do.....	7	.....	
Kagakawa.....	do.....	8	.....	
Kanagawa.....	do.....	3	.....	Including Yokohama.
Kochi.....	do.....	1	.....	
Ookayama.....	do.....	7	.....	
Osaka.....	do.....	6	.....	
Taihoku.....	Sept. 1–10.....	2	.....	
Wakayama.....	To Sept. 10.....	2	.....	
Taiwan Island.....	Sept. 21–Oct. 10.....	11	.....	
Philippine Islands:				
Manila.....	May 18–24.....	2	2	
Do.....	June 27–Oct. 2.....	14	3	
Provinces—				
Albay.....	Apr. 18–24.....	1	1	
Davao.....	May 23–29.....	1	.....	
Mindoro.....	Feb. 21–Mar. 6.....	3	3	
Pampanga.....	July 25–31.....	1	1	
Rizal.....	July 18–24.....	1	.....	
Romblon.....	Dec. 14–31.....	42	43	
Do.....	Jan. 2–Mar. 27.....	41	35	
Siam.....				
Bangkok.....	May 2–June 12.....	1,325	736	Apr. 1–Sept. 25, 1926: Cases, 7,643; deaths, 5,023.
Do.....	June 20–26.....	56	26	
Do.....	June 27–Sept. 25.....	94	68	
Straits Settlements:				
Singapore.....	July 4–17.....	2	1	
On vessel:				
Steamship Macedonia.....	Aug. 5.....	7	.....	At Yokohama, Japan. Vessel sailed from Singapore July 18, 1926.

<sup>1</sup> From medical officers of the Public Health Service, American consuls, and other sources.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from June 26 to November 26, 1926—Continued**

## **PLAGUE**

Place	Date	Cases	Deaths	Remarks
Algeria:				
Algiers.....	June 21-30.....	1	—	Under date of July 16, 2 cases reported.
Do.....	July 1-20.....	1	—	
Do.....	Sept. 23.....	1	—	
Bona.....	Aug. 14.....	1	—	
Oran.....	Sept. 21-Oct. 10.....	9	4	
Philippeville.....	Sept. 7.....	1	—	
Azores:				
Fayal Island—				
Horta.....	Aug. 2-20.....	2	2	
St. Michaels Island.....	May 9-June 26.....	4	1	
Do.....	June 27-July 10.....	3	1	
Brazil:				
Paranagua.....	Oct. 8.....	—	—	Present.
British East Africa:				
Kisumu.....	May 16-22.....	1	1	
Do.....	Aug. 17-Sept. 11.....	3	2	
Uganda.....	Mar. 1-June 30.....	732	574	
Canary Islands:				
Teneriffe.....	Aug. 2.....	2	—	
Ceylon:				
Colombo.....	May 29-June 5.....	1	1	
Chile:				
Iquique.....	June 20-26.....	—	1	
China:				
Amoy.....	Apr. 18-June 26.....	40	30	
Do.....	June 27-Aug. 7.....	26	—	
Foochow.....	June 6-July 31.....	—	—	Several cases. Not epidemic.
Nanking.....	May 9-Sept. 18.....	—	—	Prevalent.
Swatow.....	July 25-31.....	14	—	
Ecuador:				January-June, 1926: Cases, 365; deaths, 154.
Chimborazo.....	January-June.....	9	2	Rats taken, 766.
Guayaquil.....	May 16-June 30.....	6	—	Rats taken, 30,914; found infected, 31.
Do.....	July 1-Sept. 30.....	16	3	Rats taken, 62,544; found infected, 89.
Leon.....	January-June.....	43	19	Localities, 2.
Loja.....	do.....	176	75	Cantons, 2.
Tungurahua.....	do.....	83	29	At Ambato, Huachi, and Píchyua. Rats taken, 1,542.
Egypt:				Jan. 1-Oct. 21, 1926: Cases, 139.
City—				
Alexandria.....	July 27-Aug. 12.....	4	1	
Suez.....	May 21-July 1.....	9	5	
Do.....	July 29.....	2	—	
Provinces—				
Behera.....	July 23-Aug. 15.....	4	1	
Beni-Suef.....	May 23-June 8.....	8	2	
Charkieh.....	July 27.....	1	1	
Gharbieh.....	June 2.....	1	1	
Minieh.....	July 24.....	1	1	
Sidi Barrani.....	Sept. 30-Oct. 21.....	23	3	In western desert.
France:				
Marseille.....	July 8.....	1	1	Reported July 24.
Paris.....	Oct. 18.....	1	—	
St. Denis.....	Reported Aug. 2.....	1	—	Vicinity of Paris.
St. Ouen.....	Aug. 14.....	2	—	Suburb of Paris.
Great Britain:				
Liverpool.....	Aug. 29-Sept. 4.....	2	1	
Greece:				
Athens.....	Apr. 1-May 31.....	16	4	Including Piræus.
Do.....	Aug. 1-Sept. 30.....	20	5	Do.
Patras.....	May 27-June 12.....	4	1	
Do.....	July 25-Oct. 2.....	8	4	
Zante.....	May 17.....	1	—	
Hawaii Territory:				
Hamakua.....	June 9.....	—	—	1 plague rodent trapped near Hamakua Mill.
Honokaa.....	Oct. 6.....	1	1	Plague-infected rat trapped.
Panauhau.....	July 18-24.....	—	—	Apr. 25-June 16, 1926: Cases, 53,001; deaths, 41,576. June 27-Sept. 25, 1926: Cases, 7,274; deaths, 4,135.
India:				
Bombay.....	May 2-June 26.....	16	15	
Do.....	July 18-Oct. 9.....	13	12	
Karachi.....	May 23-June 26.....	15	13	
Do.....	July 11-17.....	1	1	



# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 26 to November 26, 1926—Continued

## PLAGUE—Continued

Place	Date	Cases	Deaths	Remarks
<b>India—Continued.</b>				
Madras Presidency	Apr. 25-June 26	162	93	
Do.	July 4-Sept. 25	720	349	
Rangoon	May 9-June 26	20	15	
Do.	June 27-Oct. 9	84	74	
<b>Indo-China:</b>				
Saigon	May 23-June 26	8	3	
Do.	July 18-Aug. 7	2	1	
<b>Iraq:</b>				
Baghdad	Apr. 18-June 12	161	108	
Do.	July 18-Sept. 11	4	4	
<b>Japan:</b>				
Yokohama	July 2-Aug. 10	9	80	
<b>Java:</b>				
Batavia	Apr. 24-June 19	65	65	
Do.	June 26-Oct. 9	80	78	
Cheribon	Apr. 11-24	3	3	
Do.	Sept. 12-18	1	1	
East Java and Madura	June 13-19	1	1	
Do.	July 25-31	1	1	
Surabaya	Aug. 22-Sept. 25	18	2	
<b>Madagascar:</b>				
Ambositra Province	May 1-15	4	4	Septicemic.
Antsirabi Province	June 16-30	4	4	
Itasy Province	do.	17	10	
Do.	Aug. 16-21	1	1	
Maevatanana	do.	2	2	
Majunga Province	June 16-30	10	6	
Do.	Aug. 16-31	15	15	
Mananjary Province	do.	1	1	
Moramanga Province	Apr. 1-15	2	2	Do.
Tamatave Province	Aug. 16-30	15	10	
Tananarive Province				Apr. 1-June 30, 1926: Cases, 130; deaths, 120. July 1-Aug. 31, 1926: Cases, 126; deaths, 119.
<b>Towns—</b>				
Majunga	Aug. 1-15	14	10	
Tamatave (Port)	May 16-31	1	1	
Do.	July 1-Aug. 15	6	5	
Tananarive	Apr. 1-June 30	7	7	
Do.	July-Aug. 31	24	24	
<b>Mauritius:</b>				
Port Louis	July 31	1	1	
<b>Nigeria:</b>				
	I			Feb. 1-June 30, 1926: Cases, 191; deaths, 163. July 1-31, 1926: Cases, 121; deaths, 112.
<b>Peru</b>				
<b>Departments—</b>				
Ancash	May 1-31			May-June, 1926: Cases, 57; deaths, 16. July 1-Sept. 30, 1926: Cases, 89; deaths, 52.
Do.	July 1-Sept. 30	2		Present.
Cajamarca	May 1-June 30	10	4	
Do.	Aug. 1-Sept. 30	1		
Ica	May 1-31	1		
Do.	July 1-31	1		
Junin	Sept. 1-30	21	20	
Lambayeque	do.	1		
Libertad	May 1-31	4		
Do.	Sept. 1-30	3	1	
Lima	May 1-June 30	29	12	
Do.	July 1-Sept. 30	60	31	
Piura	June 1-30	13		
<b>Russia</b>				
<b>Senegal</b>				
				Jan. 1-Mar. 31, 1926: Cases, 37. Nov. 1-30, 1925: Cases, 3; deaths, 2. Mar. 1-June 30, 1926: Cases, 342; deaths, 213.
<b>Siam</b>				
Bangkok	May 23-June 26	2	2	Apr. 1-Oct. 2, 1926: Cases, 15; deaths, 10.
Do.	July 18-24	1	1	
<b>Straits Settlements:</b>				
Singapore	May 2-8	1	1	
Do.	July 4-17	1	1	
<b>Syria:</b>				
Beirut	July 1-Aug. 10	2		
Do.	Oct. 15			Present.
<b>Tunisia</b>				
Do.	May 11-June 30	174		
Do.	July 1-Aug. 20	13		
Kairouan	June 9	3		9 cases 30 miles south of Kairouan.

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from June 26 to November 26, 1926—Continued**

## **PLAGUE—Continued**

Place	Date	Cases	Deaths	Remarks
Turkey:				
Constantinople.....	Aug. 1-Sept. 25....	7	4	
Union of South Africa:				
Cape Province.....	May 16-22.....	5	3	
Calvinia District.....	June 13-26.....	12	6	
Do.....	June 27-Aug. 21....	3	3	
Williston District.....	June 13-26.....	2	1	
Do.....	June 27-July 3.....	1	1	
Orange Free State.....				
Hoopstad District.....	Aug. 15-21.....	1	1	
Protestpan.....	May 9-22.....	3	3	
On vessel:				
Steamship Zaria.....	September, 1926....	2	2	At Liverpool, England, from Lagos, Nigeria, West Africa; 29 plague-infected rats found on board.

## **SMALLPOX**

Algeria.....				July 21-Sept. 20, 1926: Cases, 230.
Algiers.....	May 21-June 20....	14		
Do.....	July 1-Aug. 31....	3		
Arabia:				
Aden.....	Oct. 3-9.....	1		Imported.
Belgium.....				Sept. 1-30, 1926: Cases, 2.
Antwerp.....	Aug. 1-7.....	1	1	
Bolivia:				
La Paz.....	May 1-June 30....	14	7	
Do.....	July 1-Aug. 31....	16	8	
Brazil:				
Bahia.....	June 20-26.....	1		
Do.....	June 27-Oct. 2....	71	39	
Manaos.....	Apr. 1-30.....		5	
Para.....	May 16-June 26....	26	25	
Do.....	June 27-Sept. 25....	29	19	
Pernambuco.....	July 11-Sept. 25....	166	22	
Porto Alegre.....	Aug. 10-31.....	2		
Rio de Janeiro.....	May 2-June 19....	132	91	
Do.....	July 4-Sept. 25....	2,534	1,338	
Do.....	Oct. 3-16.....	196	113	Jan. 1-Oct. 16, 1926: Cases, 3,601; deaths, 1,896.
Sao Paulo.....	June 27-Aug. 22....		5	
Santos.....	Mar. 1-7.....		1	
British East Africa:				
Kenya—				
Mombasa.....	July 5-11.....	5	4	
Tanganyika.....	May 1-31.....	252	46	
Uganda.....	Mar. 1-May 31....	3		
British South Africa:				
Northern Rhodesia.....	May 18-24.....	17	6	Natives.
Do.....	June 8-14.....	5		
Do.....	Sept. 11-17.....	1		
Canada.....				
Alberta.....				May 30-June 26, 1926: Cases, 70.
Calgary.....	Sept. 5-Oct. 30....	26		June 27-Oct. 30, 1926: Cases, 322.
British Columbia—				May 30-June 12, 1926: Cases, 3.
Vancouver.....	Aug. 10-Sept. 12....	3		June 27-Oct. 30, 1926: Cases, 62.
Manitoba.....				
Winnipeg.....	June 6-12.....	5		May 30-June 26, 1926: Cases, 15.
Do.....	July 4-Nov. 6.....	13		June 27-Oct. 30, 1926: Cases, 48.
New Brunswick—				
Northumberland County.....	Oct. 11-23.....	1		
Ontario.....				
Fort William.....	July 25-Aug. 7.....	2		May 30-June 26, 1926: Cases, 36.
Kingston.....	May 23-June 26....	5		June 27-Oct. 30: Cases, 117.
Do.....	July 11-17.....	2		
Kitchener.....	Apr. 26-May 29....	3	1	
North Bay.....	May 2-22.....	5		
Do.....	July 25-31.....	2		
Orillia.....	Apr. 26-May 29....	7		
Ottawa.....	July 18-24.....	1		
Packham.....	do.....	10		

# CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

Reports Received from June 26 to November 26, 1926—Continued

## SMALLPOX—Continued

Place	Date	Cases	Deaths	Remarks
Canada—Continued.				
Ontario—Continued.				
Peterboro	Sept. 1-30	10		
Toronto	July 18-Oct. 23	12		
Waterloo	July 18-24	6		
Saskatchewan				May 30-June 26, 1926: Cases, 16.
Regina	July 4-Sept. 25	3		June 27-Oct. 30: Cases, 95.
Ceylon				Mar. 14-May 29, 1926: Cases, 44;
Colombo	Sept. 19-Oct. 2	6		deaths, 3. Sept. 12-18, 1926:
				Cases, 2.
Chile:				
Antofagasta	June 6-12	1		
China:				
Amoy	May 1-June 26	4	8	
Do	July 4-10	1		
Antung	May 17-June 19	5		
Do	July 4-18	2		
Canton	May 1-31	4	2	
Changsha	Aug. 8-14	1		
Chungking	May 2-Oct. 2			Present.
Foochow	do			Do.
Fushun	Sept. 12-18	1		
Hongkong	May 2-June 26	19	10	
Do	June 27-July 3	1	1	
Manchuria	July 4-31	18		Railway stations.
An-shan	May 16-June 12	5		South Manchurian Railway.
Antung	May 16-June 19	5		
Changchun	May 16-June 26	6		
Do	June 27-Sept. 11	2		Do.
Dairen	Apr. 26-June 20	69	18	
Do	June 28-Aug. 8	5	3	
Fushun	May 16-June 5	4		Do.
Harbin	May 14-June 30	21		Do.
Do	July 1-28	12		
Kai-yuan	May 16-June 30	10		Do.
Kungchuling	June 13-19	1		Do.
Liaoyang	May 16-June 30	4		Do.
Mukden	do	4		Do.
Pensihui	May 16-June 19	4		Do.
Do	Aug. 8-Oct. 3	3		Do.
Ssipingai	May 16-June 30	2		Do.
Do	Aug. 1-7	1		Do.
Teshihchiao	May 16-June 30	2		Do.
Tieh-ling	Sept. 27-Oct. 3	1		
Wa-feng-tien	do	3		Do.
Do	Aug. 1-7	1		Do.
Nanking	May 8-Sept. 18			Present.
Shanghai	May 2-June 26	10	25	Cases, foreign: Deaths, popula-
Do	June 27-July 24	3	3	tion of international concession,
				foreign and native.
Swatow	May 9-Sept. 25			Sporadic.
Tientsin	June 2-26		1	Reported by British municipal-
				ity.
Wanshien	May 1			Prevalent.
Chosen				Mar. 1-June 30, 1926: Cases, 667;
Fusan	May 1-31	1		deaths, 146. July 1-31, 1926:
Selsun	do	2	1	Cases, 82; deaths, 27.
Egypt:				
Alexandria	May 15-July 1	18	3	
Do	July 23-Oct. 7	13	6	
Cairo	Jan. 29-May 13	39	8	
Estonia				May 1-June 30, 1926: Cases, 3.
France				Mar. 1-June 30, 1926: Cases, 141;
Paris	Sept. 1-Oct. 10	43	9	July 1-Aug. 31: Cases, 24.
St. Etienne	Apr. 18-June 15	7	3	
Do	Sept. 16-30	2	1	
French Settlements in India	Mar. 7-June 26	282	282	
Do	June 27-Aug. 28	68	68	
Germany:				
Coblenz	Oct. 24-30	1		
Gold Coast	Mar. 1-June 30	9		
Do	July 1-31	20	1	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from June 26 to November 26, 1926—Continued**

## **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Great Britain:				
England and Wales.....				May 23-June 26, 1926: Cases, 633;
Birmingham.....	Sept. 26-Oct. 2.....	1		June 27-Oct. 16, 1926: Cases,
Bradford.....	May 23-29.....	1		1, 638.
Do.....	Aug. 29-Sept. 4.....	1		
Hull.....	Oct. 17-23.....	1		
London.....	Sept. 26-Oct. 16.....	3		
Newcastle-on-Tyne.....	June 6-12.....	1		
Do.....	July 11-Oct. 30.....	5		At Gateshead, several cases re-
Nottingham.....	May 2-June 5.....	7		ported.
Do.....	July 18-24.....	1		
Sheffield.....	June 13-19.....	1		
Do.....	July 4-Oct. 23.....	21		
South Shields.....	Oct. 3-9.....	1		
Greece:				
Athens.....	July 1-31.....	71	6	Including Piræus.
Saloniki.....	June 1-14.....		3	
Guatemala:				
Guatemala City.....	June 1-30.....		2	
India:				Apr. 25-June 26, 1926: Cases,
Bombay.....	May 2-June 26.....	220	134	54,851; deaths, 14,771. June
Do.....	June 27-Oct. 9.....	118	64	27-Sept. 25, 1926: Cases, 27,061;
Calcutta.....	Apr. 4-May 20.....	171	152	deaths, 8,231.
Do.....	June 13-26.....	24	18	
Do.....	June 27-Oct. 2.....	45	42	
Karachi.....	May 16-June 26.....	44	18	
Do.....	June 27-Oct. 2.....	14	7	
Madras.....	May 16-June 26.....	7	4	
Do.....	June 27-Oct. 16.....	76	20	
Rangoon.....	May 9-June 26.....	10	5	
Do.....	July 4-Sept. 11.....	21	4	
Indo-China:				
Saigon.....	May 9-June 26.....	2		
Iraq:				
Baghdad.....	do.....	8	3	
Do.....	July 4-Sept. 11.....	3	1	
Basra.....	Apr. 18-June 22.....	34	25	
Do.....	Aug. 15-21.....	1		
Italy:				Mar. 28-June 26, 1926: Cases, 34.
Catania.....	Aug. 9-15.....	2		June 27-July 31, 1926: Cases, 11.
Rome.....	June 14-20.....	4		Entire consular district, includ-
Jamaica.....				ing island of Sardinia.
Do.....				Apr. 25-June 26, 1926: Cases, 201.
				(Reported as alastrim.)
				June 27-Oct. 30, 1926: Cases, 227.
				(Reported as alastrim.)
Japan.....				Apr. 11-June 26, 1926: Cases, 668
				June 27-Aug. 28, 1926: Cases,
				70.
Kobe.....	May 30-June 5.....	1		
Nagoya.....	May 16-June 22.....		1	
Do.....	July 4-10.....	1		
Taiwan Island.....	May 11-20.....	24		
Do.....	June 1-20.....	23		
Do.....	July 11-Aug. 10.....	2		
Tokyo.....	June 26-July 17.....	3		
Yokohama.....	May 2-8.....	2		
Java:				
Batavia.....	May 15-June 25.....	2		Province.
Do.....	July 24-Oct. 9.....	16		Do.
East Java and Madura.....	Apr. 11-July 3.....	100	6	
Do.....	July 4-Aug. 7.....	43	1	
Malang.....	Apr. 4-10.....	6	1	Interior.
Surabaya.....	May 16-22.....	14	1	
Do.....	July 18-Sept. 25.....	143	8	
Latvia.....				Apr. 1-June 30, 1926: Cases, 5.
Mexico:				Feb. 1-June 30, 1926: Deaths,
Aguascalientes.....	June 13-26.....		3	1,525.
Guadalajara.....	June 8-14.....		2	
Do.....	June 20-Sept. 27.....		8	
Mexico City.....	May 16-June 5.....	3		Including municipalities in Fed-
Do.....	July 25-Sept. 25.....	6		eral District.
Saltillo.....	July 18-24.....		1	Do.
San Antonio de Arenales.....	Jan. 1-June 30.....			Present: 100 miles from Chihua-
San Luis Potosi.....	June 13-26.....		7	hua.
Do.....	July 4-Nov. 6.....		21	
Torreón.....	May 1-June 30.....		17	
Do.....	July 1-Oct. 23.....		14	

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## **Reports Received from June 26 to November 26, 1926—Continued**

### **SMALLPOX—Continued**

Place	Date	Cases	Deaths	Remarks
Netherlands: Amsterdam	July 18-24		9	Feb. 1-June 30, 1926: Cases, 521; deaths, 49.
Nigeria				
Persia: Teheran	Apr. 21-July 23		10	Mar. 28-May 1, 1926: Cases, 12; deaths, 1. June 27-Sept. 11, 1926: Cases, 416; deaths, 1.
Peru: Arequipa	June 1-30		1	
Poland				
Portugal: Lisbon	Apr. 26-June 19	10	3	Jan. 1-Apr. 30, 1926: Cases, 2,529. Apr. 1-Oct. 2, 1926: Cases, 590; deaths, 236.
Do.	July 11-Oct. 23	26	6	
Oporto	May 23-June 5	4		
Do.	July 11-24	2		
Russia				Jan. 1-June 30, 1926: Deaths, 99.
Siam				
Bangkok	May 2-June 12	23	20	Jan. 1-June 30, 1926: Deaths, 99.
Do.	July 4-Oct. 2	77	60	
Spain: Valencia	Aug. 22-Oct. 23	3		One case varioloid.
Straits Settlements: Singapore	Apr. 25-May 1	1		
Do.	July 11-17	1		Apr. 1-June 30, 1926: Cases, 17. July 1-Sept. 30, 1926: Cases, 38.
Sumatra: Medan	Aug. 22-28			
Switzerland: Lucerne Canton	June 1-30	1		Outbreaks.
Do.	July 1-31	2		
Tripolitania	Apr. 1-June 30	12		Do.
Tunisia				Do.
Tunis	Aug. 11-30	2		Do.
Union of South Africa: Cape Province	June 1-30	8	1	Do.
Do.	Aug. 15-21			Do.
Idutyia district	May 23-29			Do.
Natal	May 30-June 5			Do.
Orange Free State	June 20-Aug. 28			June 6-12, 1926: Outbreaks in Pietersburg and Rustenburg districts.
Transvaal				Native.
Do.	Aug. 29-Sept. 4	1		Apr. 15-30, 1926: Cases, 2; deaths, 1.
Johannesburg	May 9-June 12	5		
Do.	July 11-Sept. 25	4		At Zanzibar, June 7, 1926: One case of smallpox landed. At Durban, Union of South Africa, June 16, 1926: One suspect case landed.
Pretoria	Sept. 19-25	1		
Yugoslavia: Zagreb	Aug. 9-15	2		Vessel from Glasgow, Scotland, for Canada. Patient from Glasgow; removed at quarantine on outward voyage.
On vessels: S. S. Karapara				
Steamship	July 2	1		

### **TYPHUS FEVER**

Algeria				July 21-Sept. 20, 1926: Cases, 34; deaths, 1.
Algiers	May 21-June 30	7	1	
Do.	July 21-Aug. 31	3		
Argentina: Rosario	Feb. 1-28	2		
Bolivia: La Paz	June 1-30		1	
Do.	Aug. 1-31	9	1	
Bulgaria				Mar. 1-June 30, 1926: Cases, 87; deaths, 14.



# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

**Reports Received from June 26 to November 26, 1926—Continued**

## **TYPHUS FEVER—Continued**

Place	Date	Cases	Deaths	Remarks
Chile:				
Antofagasta.....	May 23-June 26.....	4		
Do.....	June 27-July 3.....	1		
Concepcion.....	June 1-7.....		1	
Valparaiso.....	Apr. 29-May 5.....		1	
Do.....	Aug. 14-Sept. 18.....	7		
China:				
Antung.....	June 14-27.....	7	1	
Do.....	June 28-Oct. 10.....	37	1	
Canton.....	May 1-31.....	1		
Chungking.....	Aug. 29-Sept. 4.....			Present.
Ichang.....			1	Reported May 1, 1926. Occur-
Wanshien.....				ring among troops.
				Present among troops, May 1,
				1926. Locality in Chungking
				consular district.
				Feb. 1-June 30, 1926: Cases,
				1,005; deaths, 112. July 1-31,
				1926: Cases, 37; deaths, 6.
Chosen:				
Chemulpo.....	May 1-June 30.....	38	2	
Do.....	July 1-31.....	7	2	
Gensan.....	June 1-30.....	1		
Seoul.....	do.....	8	3	
Do.....	July 1-Aug. 31.....	8		
Czechoslovakia.....				Jan. 1-June 30, 1926: Cases, 156;
				deaths, 6.
Egypt:				
Alexandria.....	July 16-Aug. 19.....	3		
Do.....	Oct. 1-7.....	1	1	
Cairo.....	Jan. 29-May 13.....	89	27	
Do.....	July 23-Aug. 5.....	1		
Port Said.....	June 4-24.....	4	1	
Do.....	July 9-Oct. 7.....	5	1	
France.....	Aug. 1-31.....	5		
Great Britain:				
Scotland—				
Glasgow.....	July 30-Aug. 21.....	9	1	
Greece:				
Athens.....	Sept. 1-30.....		17	Including Piræus.
Hungary.....	May 1-June 30.....	3		
Ireland (Irish Free State):				
Cobh (Queenstown).....	May 30-June 5.....	1		
Do.....	June 27-Aug. 23.....	2	1	
Cork.....	June 5.....	1		
Cork County.....	Oct. 17-23.....	1		
Kerr County—				
Dingle.....	June 27-July 3.....	1		
Italy.....				
Palermo.....	Sept. 12-18.....	1		Mar. 28-May 8, 1926: Cases, 3.
Japan.....				Mar. 28-May 29, 1926: Cases, 37.
Latvia.....				May 1-June 30, 1926: Cases, 19.
				Aug. 1-31, 1926: Cases, 2.
Lithuania.....				Mar. 1-June 30, 1926: Cases, 199;
				deaths, 22. July 1-Aug. 31,
				1926: Cases, 23.
Mexico.....				Feb. 1-June 30, 1926: Deaths, 189.
Durango.....	July 1-31.....		1	
Mexico City.....	May 16-June 5.....	20		Including municipalities in Fed-
Do.....	June 13-19.....	9		eral District.
Do.....	July 25-31.....	3		Do.
Do.....	Aug. 15-Oct. 30.....	69		Do.
San Luis Potosi.....	June 13-26.....			Do.
Morocco.....				Present, city and country.
Norway:				Mar. 1-June 30, 1926: Cases, 426.
Stavanger.....	Sept. 6-12.....	1		July 1-Aug. 31, 1926: Cases, 20.
Palestine:				
Gaza.....	July 6-12.....	1		Mar. 1-June 30, 1926: Cases, 14;
Haifa.....	July 13-Aug. 30.....	5		deaths, 1. Aug. 10-Oct. 11,
Halalal.....	Aug. 17-23.....	1		1926: Cases, 12.
Jaffa district.....	June 15-28.....	5		
Do.....	Sept. 28-Oct. 4.....	1		
Jerusalem.....	Sept. 14-27.....	2		
Majdal district.....	July 13-Aug. 2.....	2		
Nazareth district.....	do.....	3		
Petah Tokvah.....	Oct. 5-11.....	3		
Tiberias.....	Aug. 3-9.....	1		
Yavniel.....	Aug. 17-23.....	1		

# **CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued**

## **Reports Received from June 26 to November 26, 1926—Continued**

### **TYPHUS FEVER—Continued**

Place	Date	Cases	Deaths	Remarks
Persia:				
Teheran.....	May 23-June 22.....		1	
Peru:				
Arequipa.....	Jan. 1-31.....		2	
Poland.....				Mar. 28-June 26, 1926: Cases, 1,272; deaths, 83. June 27-Sept. 18, 1926: Cases, 294; deaths, 22.
Rumania.....				Mar. 1-June 30, 1926: Cases, 899; deaths, 83. July 1-31, 1926: Cases, 65; deaths, 9.
Russia.....				Jan. 1-Apr. 30, 1926: Cases, 18,647.
Spain.....	Jan. 1-June 30.....		13	
Tunisia:				
Tunis.....	June 11-30.....	3		Apr. 1-June 30, 1926: Cases, 110. July 1-Sept. 20, 1926: Cases, 101.
Turkey:				
Constantinople.....	June 16-22.....	1		
Union of South Africa.....				Apr. 1-May 31, 1926: Cases, 153; deaths, 19.
Do.....				July 1-31, 1926: Cases, 90; deaths, 17.
Cape Province.....				Apr. 1-June 30, 1926: Cases, 202; deaths, 24, native. July 1-31, 1926: Cases, 58; deaths, 15.
Glengray district.....	June 27-July 3.....			Outbreaks.
Grahamstown.....	do.....	1		
Natal:				
Durban.....	July 25-Sept. 18.....	11	1	Apr. 1-June 30, 1926: Cases, 28. July 1-31, 1926: Cases, 23; deaths, 2.
Orange Free State.....				Apr. 1-June 30, 1926: Cases, 24; deaths, 4. July 1-31, 1926: Cases, 7.
Transvaal.....				Apr. 1-June 30, 1926: Cases, 10; deaths, 5. July 1-31, 1926: Cases, 2. Aug. 15-21, 1926: Outbreaks.
Johannesburg.....	Aug. 29-Sept. 4.....	1		Outbreaks.
Walkkerstroom district.....	June 20-26.....			Outbreaks.
Wolmaransstad district.....	do.....			Do.
Yugoslavia:				
Zabreb.....	May 15-21.....	1		Apr. 15-June 30, 1926: Cases, 48; deaths, 7. July 1-Aug. 31, 1926: Cases, 3; deaths, 1.

### **YELLOW FEVER**

Place	Date	Cases	Deaths	Remarks
Brazil:				
Bahia.....	Reported June 26.....			Present in interior of Bahia, Pirapora, and Minas.
Do.....	May 9-June 26.....	10	7	
Do.....	July 4-10.....	1		
Gold Coast.....	Apr. 1-June 30.....	8	4	
Nigeria.....	June 1-30.....	1	1	